Solid Copy

The CW Operators Club Newsletter
August 2026 — Issue 199

The sun sets on a busy day at WRTC. Referee Jim, K4QPL, reports from the field on page 17.

CWops "CWT" 1 hour 'tests
Every Wednesday at 1300z and 1900z
Every Thursday at 0300z and 0700z
Exchange: name/number (members)
name/SPC (non-members)
Avoid DX Pileups!

CWO Mini-club callsign web site:
http://cwomc.org

CWops "neighborhood": Look for CWops on 1.818, 3.528, 7.028, 10.118, 14.028, 18.078, 21.028, 24.908, 28.028, 50.098 "and up"

CWops Officers and Directors
President: Don Greenbaum, N1DG
Vice President: John Glover, W2QL
Secretary: Jim Talens, N3JT
Treasurer: Craig Thompson, K9CT
Director: Bert Banlier, F6HKA
Director: James Brooks, 9V1YC
Director: Raoul Coetzee, ZS1C
Director: Riki Kline, K7NJ
Director: Allan Mason, VK2GR
Director: Theo Mastakas, SV2BBK
Director: Ken Tanuma, JN1THL
WebGeek: Dan Romanchik KB6NU
Newsletter Editor: Dick Strassburger, N9EEE

President's Message

Youth

In 1962 I was an 11 year old boy scout studying for the radio merit badge. My dad, WA2UDV, was the scout master. The assistant scout master was Arnold, W2GDS. My sister and brother were already hams as was Arnold's two sons. Arnold was the one who taught the troop

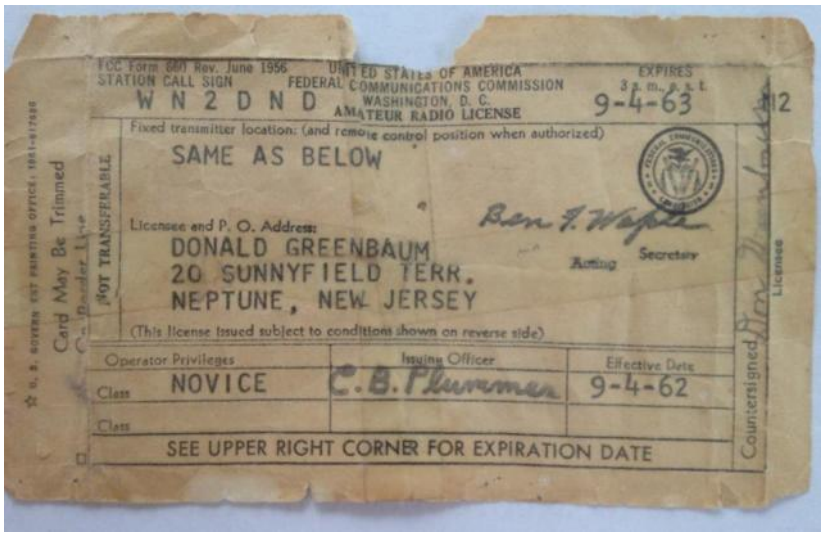
(Continued on next page)

Table of Contents

President's Message 1
Editor's Notes: CW Dog Days of August 3
Ops News and Notes 4
CWops Scholarship Recipient - Urgent Jere .. 14
How We Were: W2IY 16
K4QPL: WRTC 2026 17
G3DJB: Bletchley Park & the NRC 22
K6KM: Chasing 2x Mountain Goat in DE 29
KF7WX: My Other Hobby Is...Apples 32
Annct: 2026 CW Open 41
QRV: CWops DX with ACØM 42
New Members 44
Hamming It Up 44
Giving Back 45
CW Academy 47
CWT Update 49
CWops Member Awards 51
QTX: The Art of Conversational CW 56
My Story: New Member Introductions 60

(Continued from previous page)

Morse code and administered my Novice and Technician license exams. My becoming a ham was just part of the environment I grew up in.



My story probably sounds familiar to a lot of you. The average age of the 2,715 CWops members who answered the birthday question on joining is 69 (Thank you Trung, W6TN for the statistics in this letter). How many of our members are under 26? 26. We have only 11 teenage members. The average ham age is 68 as a whole. So, if we are representative of the ham community there are NOT a lot of hams under 26. Since the FCC does not report age statistics we can only go by sweepstakes birth years and some dated ARRL/NCJ numbers. How often do you copy a report with a birthday after 2000?

Where will our club be in 10 years? Where will the hobby be? Both are on an aging out trajectory. I'm sure we've all read the editorials.

How is our hobby dealing with this? A little research on my part keeps pointing to groups like YACHT (if you are on Facebook go to their page) and YARC (an active youth group on Discourse) with 350 members. And there are YOTA worldwide camps. DX Engineering has a blog devoted to youth outreach. A growing number of DXpeditions now feature young operators and the Northern California DX Foundation will fund airfare and in some cases even the member participation in DXpeditions. Qualifications for these grants usually include CW skill.

Contesting has also done a great job in promoting youth participation. K3LR, W3LPL, KC1XX and other large contest stations have for many years invited kids to their multi multi stations, including CW contests. The recent WRTC had 8 youth competitors (4 teams). The ARRL contest has for many years sponsored plaques for competitors under 18 (my son won several of them).

Schools are increasingly introducing ham radio as part of their STEM curriculum. Dayton Hamvention makes a large effort with youth activities. The hobby has awakened to the challenge. Is it enough?

Since January 2020, 162 students under 25 have signed up to take classes. 134 have graduated. Among those were 3 Advanced, 19 Intermediate, 28 Fundamental and 84 Beginner promotions.

(Continued on next page)

(Continued from previous page)

I propose a youth category in the 2027 CW Open including a plaque to the winner. Dues should be free for everyone below age 26. And, we need to be reaching out to clubs informing them of CW Academy.

It is up to us, individually and as a club to not only recruit hams but, more importantly, to train the next generation of CW operators.

***73, Don*, N1DG, President** (CWops #2)

SC

Editor's Note

August: The CW Operator's Dog Days

August is when a CW operator learns to appreciate the art of making do. Solar Cycle 25 is sliding down the far side of its peak, and while the sun still has plenty of life left, the easy, wide-open high-band DX of the better days is becoming less predictable. For DXers and contesters, that means listening carefully, catching openings when they appear, and enjoying every rare multiplier.

Meanwhile, 80 and 160 meters are mostly a summertime exercise in patience—and noise.

On the other end of the spectrum (pun intended), 6 meters has been on fire. Now **that's the Magic Band** with an extended season into August bringing unpredictable openings almost every day, with stations suddenly appearing from places that seemed impossible moments before. Even QRP operators with nothing more than a simple wire antenna are enjoying surprising contacts. On 6 meters, you never quite know what will happen next—and that's exactly the fun.

August also reminds us that CW isn't confined to the shack. Toss a key, pocket-sized rig, battery, and wire antenna into the car and head for a park. POTA and SOTA turn an ordinary summer day into an operating adventure, where every contact feels like you've reeled in something special.

And speaking of reeling one in: August is prime fishing season. Whether you're landing a DX station, a summit, a park activation—or an actual fish—there's something deeply satisfying about the thrill of the catch.

So turn on the radio, get on the air, and reel in a big one!

***73, Dick* N9EEE,** (CWops #3113)

Editor, *Solid Copy*
SolidCopy@cwops.org

Ops News and Notes

Duncan (Mac) Fisken, G3WZD

Welcome to another Ops News and Notes This is your space to let our Members know about an interesting activation, an operating award, a shiny new key or perhaps a useful gizmo that makes your CW experience even better. Please send all submissions to me at NewsAndNotes@cwops.org and remember, there's no need to wait for Dick's monthly call for articles, or my reminder. TU!

We regret to report the following Members have become Silent Keys .
Condolence cards have been sent on behalf of CWops.

William "Bill" Bennett
N7DZ #3713
on 22 May 2026

Rob Norcross
VK6HG #1029
on 24 May 2026

Gary, AF8A #2092 Every once in a while, something happens which restores your faith in ham radio, and particularly in local clubs. I was recently invited to speak at the Mahoning Valley ARA (in northeastern Ohio, USA) on HamSCI, the citizen science group in which I've participated for the last seven years. I figured that the evening would go well when not one but two fellow CWops would be in the audience: Rich KB8GAE and Fred WB8HYD. I chose to make the 75 mile (120 km) drive and present in person, rather than over Zoom, because of what their club does to keep the ham radio flame burning brightly: Field Day (summer and winter), a multi-multi entry in the Ohio QSO Party, special events, licensing classes and VE testing, club repeater...I could go on. What a great group - we need more like the MVARA!

Saul, W3WHK #1392 Most of you are familiar with WM3PEN (our club call, Holmesburg ARC) as a bonus station representing Philadelphia, PA in the annual 13 Colonies special event in early July. This year, WM3PEN was pleased to also represent our city in the World Cup 2026 tournament special event (11 June - 19 July). CWops members who used the callsign during these events were WA3AAN, WA3GM, and W3WHK, with a lot of CW help from WK2G. I'm sure there were also numerous CWops members using the special K2x callsigns corresponding to the 13 original colonies which, after we declared our independence from Great Britain 250 years ago, became the USA.

WM3PEN, all modes and events combined, made 14,263 QSOs, second only to VB7F Vancouver. This included contacts in all 50 states and DXCC. Thanks to all CWops members who called in! Logs have been uploaded to Clublog, eQSL, QRZ, and LoTW (and to hamlog.online for 13C), but if you want a very cool QSL card for the World Cup tournament and/or 13 Colonies, you need only send your QSL with a self-addressed stamped envelope (though any donations are gratefully ac-

(Continued on next page)

(Continued from previous page)

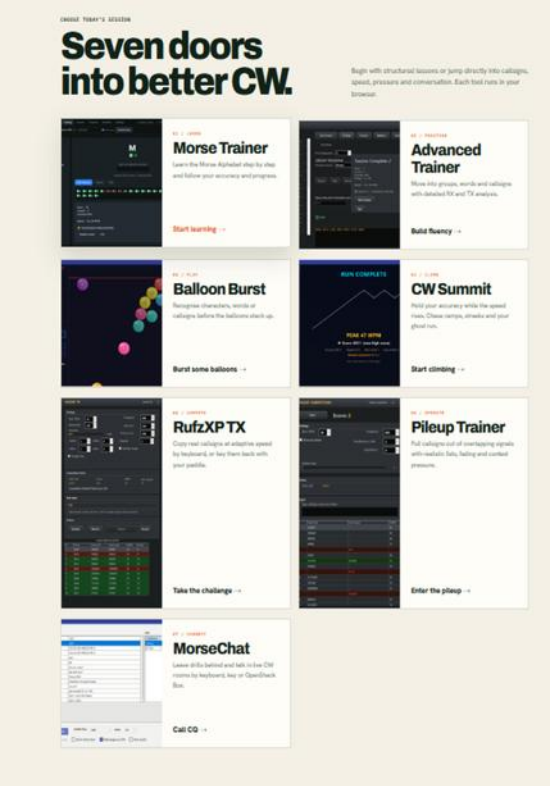
cepted). If you worked us during the 13 Colonies period (1-7 July), you can get *two* QSL cards at one Ame, as shown in these pictures. See WM3PEN's QRZ page for details.

Now for the hardest work: Coordinator, callsign trustee, and 13C Managing Director WA3PZO and his crew will be answering QSL requests for WM3PEN, W1C, and the elusive GB13COL for months to come.

(Continued on next page)

(Continued from previous page)

Tom, DF7TV #2613 *OpenShack* is a new WEB-based set of training tools for getting better in CW. The author is Frank, DL2CC (#511) and he is open-minded for suggestions. If you like to improve in CW – give it a try, publish your training results on the *OpenShack's* webpage and send some feedback to Frank, if you have any questions or proposals for enhancements. I like especially the Pileup Trainer.



Jack, W1WEF #48 At my summer home on Cape Cod I've had a 60 ft tower with a TH6 for over 30 years. The antenna was already old when I put it up, but it has worked great until this summer. When it rained, the SWR would go through the roof. Shortly after the rain stopped the SWR returned to 1:1.

I guessed that the problem was the same as I had seen numerous times at my Ct QTH where I also had TH6s. A Grass carrying wasp (genus Isodontia) would stuff the traps with grass, and when the grass got wet it affected the SWR. It would take a while for the wet grass to dry out, but in this case, it didn't take long at all after the rain stopped to return to normal.

My good friend Norm, WA1NLG, removed the driven element so I could inspect it. On a TH6 the DE is close to the mast and easily reached from the top of the tower. I opened all the traps and found them to be as clean as a whistle inside with no grass. However, I couldn't believe the holes I found in three of the endcaps! It looked as if a squirrel gnawed through the

(Continued on next page)

(Continued from previous page)

plastic, but squirrels don't climb towers! It was just the result of old age and sun, wind and weather.

After replacing the endcaps with a few new spares I had, all is well again and I worked UA0DAR this morning after heavy rain. What I figured was happening was that there was a small segment between spacers inside one end of the cap that filled up with rainwater and put one end of the inductor under water. When the rain stopped the water seeped out and it was OK again.

One thing I know for sure: In my next life I'll never put up a TRAPPED antenna again!

Jared, W7AQB #3774 June 6 2026 W7AQB and KC9RAV operated as NØR during the Museum Ships Weekend from the USS Aries located on the Gasconade river in Gasconade, Missouri. Putting the only museum ship from Missouri on the air during the event.

USS Aires PHM-5

Yearly the Battleship New Jersey Amateur Radio Station (NJ2BB) hosts the amateur radio event Museum Ships Weekend. Promoting awareness for historical ships that are now museums. Amateurs operate from ships on the amateur bands. Many of the ships use existing antennas and in some cases radios original to the ship. The battleship New Jersey and carrier Hornet are some notable examples of the more than 100 ships who participate. I first became aware of the event in June of 2025 after spinning the dial, making a random QSO with the Hornet and then looking them up on QRZ. I immediately began searching for the closest ship I could volunteer to board and operate from for the following year (2026). I was entranced by whimsical notions of calling CQ from a radio room in the bowels of a ship.

I promptly realized there is very little ocean near enough to host a museum ship and there were no ships participating from Missouri. Not to be dissuaded, I found a website listing museum ships across the United States. Which lists one museum ship in Missouri - The hydrofoil USS Aries PHM-5, located at the hydrofoil museum in Gasconade, Missouri. I reached out to the hydrofoil museum explaining what the event was and if it were something they would be willing to let us do. I then recruited KC9RAV who was immediately "onboard." After which I got in touch with the Battleship NJ ARS who let us know that the Aries indeed was eligible to participate. The hydrofoil museum folks let us know they were glad to have us. Now we were committed and excited to get to do it!

The Aries can be visited by appointment. We hauled our families out, toured the Aries, and took a look at where we might set up antennas and radios. Then all of the sudden it was June 2026 and we were setting up at the ship. Both of us used ICOM IC-705's. I ran a CW station using a center-loaded vertical, which I have often used for POTA activations. KC9RAV used a wire antenna hoisted above the radom. Corey and I have luckily done plenty of POTA activations together with our gear, so we were confident it was going to work. I feel like if we had over-planned and

(Continued on next page)

(Continued from previous page)

under-practiced we might not have had nearly the ease of setup and getting on the air we experienced. Setting up on the bridge ended up being pretty neat, despite my allusions of being tucked away in a radio room. We watched fishermen come and go while having a 360 view of the Gasconade river. Corey set up his tablet on the swivel arm where a gyroscope once resided. Making more than 40 contacts on FT8. I set my 705 in a cavity of the bridge console that probably held navigational equipment that had surely remained with the Navy. For my key I used a NØSA SLP key.

I added an external 7.5 Ah battery since we planned to operate from 9am to 2pm.

Bridge window view of the Gasconade River

We had pleasant weather, a little warm but not bad. Contacts rolled in leisurely giving us plenty of time to take in the river, eyeball QSO, and admire the very verdant foliage we've had this year. It was definitely a lot of fun and I'm hoping we get to do it again next year.

Jim, N3JT #1 I've been operating as 7Q9JT (Malawi) remotely for some days, as I believe was announced earlier on our club ListServ. The IC-7610 and KPA-1500 (at 300 watts) with wire antennas seems to be heard well enough but copying signals in a pileup where everybody is S4, every signal has fast QSB causing dropped letters, and an overlay of echo all make for a super challenge in picking out call signs! It is vastly tougher than fielding strong stateside signals in, for example, an ARRL DX contest from the Caribbean. I've done both and there's no comparison. A few notable signals manage to break through, and that's a relief after struggling to copy a heterodyne of weak callers on the same frequency. Even 2 or 3 callers essentially cancel one another out unless or until the timing allows one to be heard alone, which is time-consuming.

Kudos to those who know to try calling just off my transmit frequency! Anti-kudos to those who continue to call throughout a QSO. Add to all this the limited options for what can be transmitted.

The N1MM Logger macros provide the basic exchange information, like call sign, signal report, "?." While using the keyboard keyer mode within N1MM is possible, timing in a pileup really does not make that practical, so when folks say "Hi Jim" or the like I cannot risk trying to respond in kind. At home I do that with my paddle and keyer, but there is no such provision at this remotely operated station. Note too that there is delay from when I hit an N1MM macro key to when the signal actually transmits, probably more than full second. That means, for example, when the other station finishes calling me and I finally manage to get the letters right and then I initiate my side of the exchange, a full 2 seconds may have passed during which time the other station may be calling again. Similarly, at the end of a QSO when I send "TU 7Q9JT" the actual transmission commences at least a full second later. If I anticipate a bit and hit the N1MM macro as the other station is saying "73," it almost sounds like a normal exchange!

(Continued on next page)

(Continued from previous page)

There are other complications that slow the QSO rate. "Split" on the IC-7610 in remote mode does not seem to work properly so I use the RIT. But that requires a digital adjustment with the cursor on a different part of the screen. Then I have to return the cursor to the logger window. It's not like turning a knob by any means and it causes lost QSOs, delays, etc. "Split" would operate similarly. Obviously, more practice will shorten the delays. Again, I appreciate the patience of those calling.

Finally, setting up LoTW took some time, with a new certificate needed, and so on. And some folks don't use LoTW! Other operators also will be using the station under different 7Q call signs. Please keep all that I've noted here in mind when you hear delays in the QSO progression. Above all, thank you for your patience.

Mary, VE3INE #3588 I am pleased to receive a plaque from the SKCC Club for an award of working 100 marathon ragchew QSOs with 100 different members. Each QSO has to be at least 60 minutes long.

SKCC
Straight Key Century Club
Marathon QSO Award #33
is hereby awarded to
Mary Lim, VE3INE, SKCC #27027
In recognition of the completion of Rag Chew QSOs with 100 different SKCC members, each QSO lasting 60 minutes or longer.
All QSOs were logged between 17 February 2026 and 12 May 2026.

The bad news is that lightning struck my antenna wire on July 21 and set my radio station on fire immediately. Almost everything in my house was damaged in the fire. I am not planning to have a station again as the cost is too high in my circumstances. Besides, people in the condominium blame me for the damage and the bumping up of the next insurance premium. QRT.

Ken, KN2D #3566 One of the great joys of operating is making friends around the world. Pictured here is a QSL from a CW contact I had with I1YRL, Luc.

(Continued on next page)

(Continued from previous page)

I was pleasantly surprised to receive these items - a SQL, plaquettes Luc made with my callsign and a ribbon with both of our callsigns, as well as several Euros from different European countries. He also sent several photos and a postcard.

In return, I sent him a QSL and some US currency he asked for, for his grandsons. I'll be giving my grandson the currency Luc so graciously sent me.

Tom, W2EQ #3884 I did my first POTA activation on July12, CW-only, of course. I hauled my old Yaesu FT-890 out of storage, grabbed my boat battery and drove off into the Colliers Mills Wildlife Management Area, US-8035, in nearby Jackson NJ. Using Shark vertical antennas on my pickup truck bed, I made 33 CW contacts from a nice shady spot by the lake. Since then, I've improved my setup and done 6 more activations at 3 additional parks and have really enjoyed it.

Duncan, G3WZD #1979 During the week of 5 August I had the pleasure of being part of the volunteer station building team in the run-up to the World Radiosport Team Championship 2026 (WRTC 2026), which was being hosted by the UK for the first time.

(Continued on next page)

(Continued from previous page)

Split into seven teams, the goal was to build 51 identical HF stations (one for each of the 50 2-man teams, plus one spare), comprising a LZA triband yagi, 11M telescopic mast with rotator, monoband dipoles for 80M and 40M (all antennas had separate feeders), and a gazebo equipped with operating tables, chairs, fan, light and a power distribution block. AC power was provided by a petrol genset. Each was also provided with a portable camping toilet. Much of the gear was shipped into the UK from Italy, the previous host nation. The competitors provided their own radios and logging computers. Each team also had an assigned referee for the full 24 hours of the contest.

(Continued on next page)

(Continued from previous page)

The stations were all located on large estates around the area of Thetford, in Norfolk. Unfortunately, coinciding with one of this year's heatwaves with temperatures over 30C, it was very hot work; all out in the open and often with no shade.

Assembling the Yagi

Noteworthy is that fact that several teams included well-known contesters from the ranks of CWops (see [WRTC website for team lists]). Sadly, my time on site was limited and I had to return home without a chance to eyeball the CWops members who have appeared so often in my CWT logs!

(Continued on next page)

(Continued from previous page)

Team 6 final build completed (G3WZD 2nd from left)

Thank you and, until the next News and Notes, QAC!

Duncan, G3WZD (CWops #1979)
NewsAndNotes@CWops.org

CW Open – September 5, 2026

The session times will be as follows:

Session 1: 00:00 UTC, Sept 5

Session 2: 12:00 UTC, Sept 5

Session 3: 20:00 UTC, Sept 5

Event web page

2026 CWops Scholarship Recipient

Urgent Jere, 7Q6UJ CWops #3848

Thank you for awarding me the CWops ARRL scholarship. I am very grateful for the opportunity to receive the scholarship and for the help with my education. I would be glad to thank you personally and to tell you how much this means to me.

My journey in amateur radio started in 2023, when I came across Don Jones 7Q6M (K6ZO). Don showed me what amateur radio is all about and put me in front of the radio to play around on the frequency and listen to people talking; it was a CQWW contest. My curiosity made me hang around with him a lot. He has taught me about ham radio to this day. Amateur radio has helped me make friends and connect with people all over the world. It has also opened the door to STEM.

I'm at the University of Livingstonia (UNILIA) in Malawi studying computer engineering. The university is located on top of the hill. I'm thankful for the scholarship. May God bless you all.

Sincerely,

Urgent Jere, 7Q6UJ (W4UJ)

CWops #3848

ARRL Announcement of the CW Operators Club Scholarship Winner

By Craig Thompson, CWops #276 - ARRL Foundation board member

Each year ARRL announces application time window for anyone pursuing higher education. The applicant fills out the application and notes during the process that they know and operate CW. This year five applicants fit this criterion. They were graded based on their application to the criteria on file for the CW Operators Club.

Some of you may know, as this person was announced at the Dayton Hamvention, but for the rest of us, I am pleased to let everyone know that Urgent Jere 7Q6UJ was selected as this year's winner. The money will be sent to his university and applied to his tuition, books and expenses. Any unused portion is returned to ARRL for next year's scholarship.

Congratulations to Urgent, CWops member #3848!

(Continued on next page)

(Continued from previous page)

Terms of the CW Operators Club Scholarship:

Endowed through the generosity of CWops, this fund is intended to provide funding for the educational expenses of a licensed amateur radio operator who is pursuing higher education.

Requirements:

1) The CWops Scholarship Fund will be administered by the ARRL Foundation.

2) The scholarship is available to any qualified applicant regardless of location or nationality.

3) There are no requirements as to field of study, subject to the requirement of Institution, below.

4) Additional requirements:

a. Institution: Fully accredited educational institution of higher learning, 2-year, or 4-year, undergraduate, graduate, or post-graduate, or a fully accredited trade, art, or professional school at which the recipient intends to be awarded a degree or license in the chosen field of study.

b. CW Ability: Demonstrated CW operating ability within the last 24 months by providing a copy of a certificate, listing in a magazine showing results or a letter from a person responsible for membership. Examples include but are not limited to the following:

i. ARRL Code Proficiency certificate at 15 wpm or higher;

ii. Successful completion of CW Academy Beginner Level or higher;

iii. Membership in CWops or HSC or other club where some level of CW proficiency is a requirement for membership;

iv. Participation in a CW contest where the results have been published (participation in a multi-op where the station owner provides a letter saying you operated part or all the event operating CW);

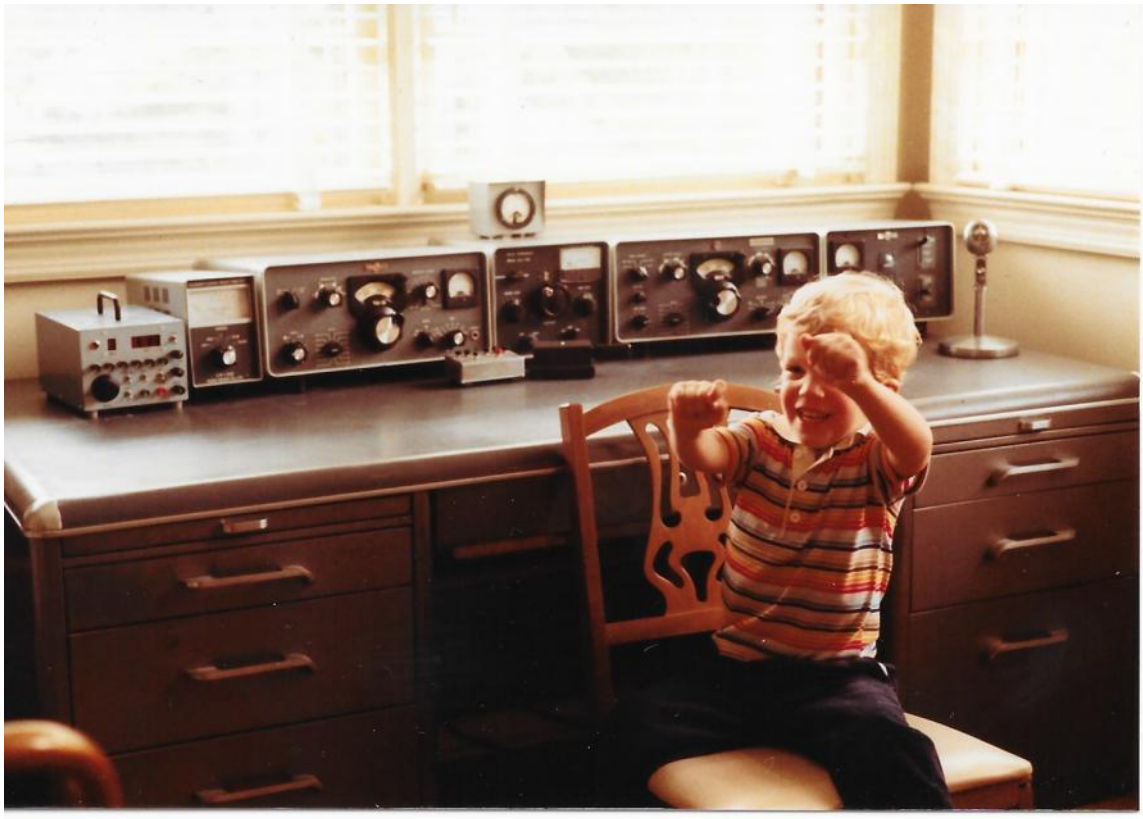
v. Operation in a CW traffic net where the net manager provides a letter attesting to the candidate's on-air participation; or

vi. Achieving any award where all contacts are CW.

How We Were

Ian Capon, GWØKRL

W2IY, Mike Tortorella, CWops #3031



"This is one of my favorite pictures of my son Matthew, taken when he was about 3.5 YO, in dad's shack at W2IY in Middletown, NJ. CW-only then, too! Homebrew 6-memory keyer, homebrew antenna tuner, and Collins S/Line. You can't see it, but the mic is not connected to the transmitter. The Nye Viking iambic paddle soon gave way to something more, ahem, substantial (if you'd like to see some paddles with homemade finger pieces by Fred KT5X please see W2IY's QRZ page). "

So now it's your turn, do you have a picture to share accompanied by a brief paragraph description, of your early days in radio, experimenting, exploring or just "being a ham". Please send it to Ian Capon.

***73, Ian* GWØKRL** (CWops #2896)

WRTC 2026—Scratch That Off My Bucket List!

Jim Jordan, K4QPL (CWops #244)

Having been a contester for many years, individually and with teams at NY4A and VP5M, dozens of top level world wide contest call signs have floated in my brain like old friends that show up in my memory and my logs several times a year. Unlike Dayton, where at Contest U and CWops dinners I have made many personal contacts, not many of the hams from other countries are able to meet us there.

So the World Radiosport Team Championships, which only takes place every four years with the elite of contesting having qualified and chosen similar team partners, seemed like an ideal opportunity for expanding my horizons. If you're not familiar with WRTC, please visit the many web sites, YouTube channels, etc. to get the big picture which space here does not allow. But in summary, there are 50 two-person teams which participate M2 as a sub-contest in the IARU test. The host country provides 50 identical locations field day style, with identical antennas, tents, etc. in locations as close as possible to equal in elevation, propagation, etc. Sites and special event call signs are drawn so the identity of each team is not known. This year WRTC 2026 was hosted by the UK amateur community whose planning, organization, location and facilities were superb. Headquarters and accommodation was about 50 miles north of London with the operating sites in the eastern counties with open country and flat terrain.

Another feature of WRTC is that in addition to a panel of judges for the contest, each team must have a referee who can listen in stereo to both operators SO2R style for both CW and SSB, monitor the power output, be sure the ops follow the rules and good practices, and do not identify themselves which might give them an unfair advantage. Not least you must be able to stay awake in an outdoor environment for the 24 hours of the contest which considering logistics turned out to be about 40! Referees are appointed based on their own qualifications and are also assigned to teams by random drawing. I was honored to be accepted from more than double the applications for available spots. With that notification in October 2025, my personal participation began.

Calendar marked, flights booked, room reservations confirmed. Tricia, my ham-tolerant wife, originally declined but by March she decided to come along, with a promise of additional sightseeing in England afterwards perhaps having some influence! England is our favorite vacation destination and as we had spent time in the same area before. We added a rental car to the plan so we could better use our free time visiting National Trust and other historic places.

Takeoff at last. Tuesday, July 7, on the direct Raleigh to London overnight flight. On to our first stop Wednesday morning, a beautiful English country estate and gardens with nice lunch in the "tea room". Then to the Wyboston WRTC HQ for afternoon check-in. A warm welcome with our personal ID lanyards, meal tickets, printed programs and a nice "swag bag" of WRTC goodies all ready for us. The complex consists of three nice hotels all ground level and filled with WRTC organizers and participants. The HQ unit was well equipped with large meeting and dining facilities and an open courtyard adjoining the lounge and bar. Britain was however going through an historic heat wave with daytime temps reaching the 90's and most hotels had never needed room

(Continued on next page)

(Continued from previous page)

air conditioning. Fans were provided, but the temp in the rooms was uncomfortable. The lobbies and bars provided welcome relief. And that "made" WRTC 2026 for us. CWops was well represented there. You couldn't turn around without meeting an old friend or making a new one. Meeting a person you had worked dozens of times, from major DX contests to the NC QSO party, was an experience not to be missed. Hearing these calls in future contests will bring a smile and a pleasant memory, even if it was just a few minutes at breakfast or over a drink. Tricia also made new acquaintances with wives and others with conversations unrelated to radio but connected by common interests in life and family universal around the world.

The pre-contest days flew by. Opening ceremony, referee training, site visits, free time sightseeing, drinks and lingering meals and conversations filled up the hours. Again, each activity was a new opportunity for friendship and discussions. Enough praise can't be given to the UK hosts for their organization and communication with clear daily schedules which were generally kept.

MB4W team IK2PFL K4QPL IK2JUB

At the morning meeting on Friday site, referee and sealed call sign drawings were held. I met my team, EU#5 being the Italian team. Luca and Stefano spoke excellent English and we quickly became friends. We loaded equipment and boarded the minibuses for our site, all located in an area more than an hour's drive from HQ. Tents and antennas were already erected so my team got busy assembling their station while a flock of sheep curiously watched us from the shade of a nearby grove. The sun was hot and I could have believed I was back in North Carolina for Field Day. I helped the contestants as much as possible with their complex M2 setup which included a triplexer for the beam and a two-radio antenna switch. They also provided the mixer for my audio feed which was also to be recorded. Setup included equipment provided to the Referees including a two-radio power output monitor, a preprogrammed cellular/computer and CAT-5 hub for laptop inputs and real time log reporting, a dedicated cell phone to contact HQ, a flash drive for the 24 hour recording, a synchronized clock together with the sealed envelope containing the team call sign. The envelope was to be opened only 15 minutes before the start of the contest. Each site was a minimum 500M apart so there were only 4 in our immediate area. Volunteers kept a reasonable watch on the sites but transceivers and critical components were brought back Friday night.

Saturday morning came with an early special breakfast for the teams and referees before the final meeting and we boarded our minibuses for our assigned site and final setup. What about food for the contest? We were given 60 UK pounds (roughly $25/person) cash to share when our

(Continued on next page)

(Continued from previous page)

bus stopped at a supermarket on the way. We mostly picked up ready-made sandwiches and snacks. We even had enough change left over for an after-contest drink. In addition to the HQ site managers, volunteers were on hand to make sure we had everything else we needed and to attach extended-run gasoline cans to the generators. A most friendly husband/wife team had their RV parked in a central position and made the rounds with tea, coffee and snacks throughout the contest. Luca and Stefano checked out everything with their setups and made some M/ home call QSO's before the start.

12:45 pm local time and I handed the sealed call sign envelope to Luca who learned their call sign would be MB4W. They quickly inserted the call into their macros and posted a card in front of themselves. From my chair behind and between them I listened in to make sure all was "go".

IK2PFL IK2JUB

Exactly at 1200z on the synchronized clock they were off to the races. Pileups built up quickly despite only 100 watts and low antennas. As expected, high speed CW was the predominant mode although SSB Qs were made when conditions permitted. Both were superb ops and I had no complaints. Occasionally when changing frequencies the power red light would flicker. Tapping the op on the shoulder and pointing was all that was needed for him to back off the power a touch to keep it in the green. Once in a while in a big pileup they would miss the 3-Q ID requirement but again a reminder touch would be sufficient.

(Continued on next page)

(Continued from previous page)

Both were using Elecraft K3's and N1MM+ which by coincidence matched my home station and made monitoring easy. The challenge of following two skilled ops in a M2 environment and high rate pileups kept me on my toes for the early hours of the test.

Daylight seems to last forever this time of year in England and it was hardly dark by 10:30 pm. The hot daytime temps dropped quickly and by 1 a.m. we were wrapped up in sweatshirts and jackets trying to stay warm until after the pre-dawn light started to show about 4 a.m. And just at that time the 80m dipole failed completely. Stefano quickly went back to 40m and I called HQ to report the problem. A volunteer arrived with an analyzer and we determined the fault was up the tower so nothing could be done and by then it was sunrise. It may have cost the team a few Qs, but fortunately it worked for most of the short night time hours.

As the sun came up and the temperature rose, the hours and slower rate began to take their toll. Our site volunteers arrived with morning coffee and cookies which perked me up considerably. Luca and Stefano hardly noticed and kept going without a significant break. The wind had played havoc with the provided "comfort tent" but although the sheep resented visitors, the nearby grove of trees proved quite satisfactory!

MB4W at sunset

K4QPL at 3 AM

WRTC Spectators

(Continued on next page)

(Continued from previous page)

I brought two sets of headphones with one being bluetooth/wireless so I was able to move around while continuing to listen. Wireless made a huge difference in keeping me mostly ;-) alert Sunday morning as the clock creeped slowly towards 1200z.

1200z arrived and the sounds of silence were deafening! Logs were finalized and transmitted to HQ and loaded on the flash drive, the flash drive removed for me to hand in, and station teardown started after a break and congratulations all around to the team. Volunteers arrived to take down the tents and antennas and the minibus arrived to pack everything in and move to another site to collect that team and their equipment. Back to HQ for showers, dinner and SLEEP. The heat wave had diminished and the cool down made the rooms comfortable again for a well-deserved rest.

Monday after breakfast was free time while the judges pored over the logs for checking and ranking the teams to determine the podium finishers for the closing ceremonies and gala dinner Monday evening. Tricia and I went sightseeing on our own while others took bus trips to the WW II code-breaking site at Bletchley Park which we had previously visited.

(Continued on next page)

(Continued from previous page)

Once again, the closing ceremony was well planned and carried out with recognition of the many contributors to the success of the event and culminating in the final awards. My team did well but strong competition kept them down in the standings.

The open air tapas-style dinner in the hotel courtyard gave everyone an opportunity to enjoy food and mingle with contestants, volunteers, and other new friends to wind up WRTC 2026.

We all checked out after breakfast on Tuesday, some to return home, others to extend their trip for more activities. Tricia and I had rented a VRBO type townhome in Stratford-upon-Avon for a few more days of theatre, sightseeing and relaxation before our flight home.

A bucket list event well and truly satisfied!

P.S. In more detailed review of logs after the event closed, it was found that a despicable person had operated S&P with as many as 14 pirated calls, used clever means to match teams to their contest calls, and influence the outcome with additional "multipliers" to certain teams. This is presently undergoing a full investigation, but it is likely that rescoring will be necessary and will probably affect final results. There is no evidence that any contestants had any involvement or knowledge of this activity to spoil the incredible efforts of the WRTC organization and hosts to provide a fair contest with as level a playing field as is possible.

SC

Bletchley Park and the NRC

David Brown, G3DJB (CWops #3448), **Chris Rayner, G7BED** (CWops #3431), and **Mervyn Foster, G4KLE (**CWops #3283)

BLETCHLEY PARK and the NRC

The Bletchley Park Estate and the RSGB National Radio Centre (NRC) tell the remarkable story of how so many people together with civilian radio amateurs helped win the Second World War, and how their legacy lives on today.

During the war, nearly 10,000 people worked in Bletchley Park, and over 1,500 Voluntary Interceptors used their own radios and technical skill to intercept enemy Morse transmissions. They fed vital intelligence to Bletchley Park's codebreakers and played a crucial role in Allied victory.

Today, Bletchley Park and the RSGB National Radio Centre continue that tradition as a living museum and heritage attraction, featuring a working radio station and interactive exhibition. Visitors can explore the evolution of radio from Morse code to satellites, take part in hands-on demonstrations, and

(Continued on next page)

(Continued from previous page)

even speak to people around the world via the on-air GB3RS amateur radio station - whether or not they hold a licence.

By linking wartime history with modern amateur radio, the NRC preserves one of Bletchley Park's most human and technically ingenious stories, showing how ordinary people with radios helped change the course of history - and how those same skills still connect the world today.

Bletchley Park and the Birth of Signals Intelligence

Bletchley Park begins its recent history as an English country house and estate in Bletchley, Buckinghamshire, in central England, now part of the city of Milton Keynes.

Bletchley Park became the principal top-secret centre for Allied codebreaking during the Second World War. The estate housed the Government Code and Cypher School (GC&CS) which later became known as GCHQ, playing a pivotal role in defeating the Axis powers by deciphering secure German, Japanese, and other communications.

Historians widely credit the work carried out here with shortening the war, with some estimates suggesting it ended the conflict two to four years earlier than it might otherwise have done. Beyond its immediate wartime impact, Bletchley Park pioneered early computing technology and laid the foundations of modern signals intelligence, later embodied in GCHQ.

As the centre of Allied codebreaking during the Second World War, it regularly penetrated the secret communications of the Axis Powers, most importantly the German Enigma and Lorenz ciphers.

The GC&CS team of codebreakers included among others, John Tiltman, Dilwyn Knox, Alan Turing, Harry Golombek, Gordon Welchman, Hugh Alexander, Donald Michie, Bill Tutte and Stuart Milner-Barry.

The team at Bletchley Park, a high proportion being women, helped to develop automatic machinery to assist with decryption. This work culminated in the development of Colossus, the world's first programmable digital electronic computer.

Codebreaking operations at Bletchley Park ended in 1946, and all information about the wartime operations remained classified until the mid-1970s. After the war, the site had various uses and now houses the Bletchley Park museum, now an award-winning museum and heritage attraction which tells the story of the Allied codebreakers.

House and Pre-war History

Bletchley Park estate was first known as Bletchley Park after its purchase in 1877 by the architect

(Continued on next page)

(Continued from previous page)

Samuel Lipscomb Seckham, who built a house there. He was an English Victorian architect, developer, magistrate and brewer. Born in Oxford, he later became the City Surveyor and was the original architect employed by St John's College, Oxford, to develop parts of North Oxford.

The estate, comprising 581 acres (235 ha) was purchased in 1883 by Sir Herbert Samuel Leon, who expanded the house into what architect Landis Gores described as a "maudlin and monstrous pile", combining Victorian Gothic, Tudor, and Dutch Baroque styles.

Following Herbert Leon's death in 1926, the estate continued to be occupied by his widow, Fanny Leon (née Higham), until her death in 1937. In 1938, the mansion and much of the site were purchased by a builder for a proposed housing development. This never came to fruition. Instead, in May 1938, Admiral Sir Hugh Sinclair, head of the Secret Intelligence Service (SIS or MI6), purchased the site for use in the event of war.

He bought the estate using £6,000 of his own money (equivalent to approximately £450,000/ $485,000 in 2025), as the government department concerned claimed it did not have the necessary budget. The private purchase also helped keep both the department's involved and the location itself secret.

Preparation for War

As war became inevitable; the estate was destined for use by the Secret Intelligence Service. A key advantage identified by Sinclair and his colleagues, who inspected the site under the cover of "Captain Ridley's shooting party", was Bletchley's geographical centrality within the United Kingdom.

The site was immediately adjacent to Bletchley railway station, where the Varsity Line between Oxford and Cambridge operated. The universities in those cities were expected to supply many of the codebreakers.

Bletchley was also a major transport hub. It lay on the main West Coast railway line connecting London, Birmingham, Manchester, Liverpool, Glasgow and Edinburgh. By road, Watling Street (the A5), a principal route linking London with the north-west, was nearby, while high-capacity communications were available at the telegraph and telephone repeater station in nearby Fenny Stratford.

Only a small number of bombs fell on the site and surrounding area, perhaps aimed primarily at the adjacent railway infrastructure. There were no antenna systems on site, and the single-storey brick and timber huts may well have resembled a hospital complex when viewed from the air.

The Years of Peacetime

Bletchley Park now features a Polish Memorial commemorating the pre-war work of Marian Rejewski, Jerzy Rózycki and Henryk Zygalski, mathematicians of the Polish intelligence service who first broke the Enigma cipher. Their achievements greatly assisted the Bletchley Park codebreakers and contributed significantly to the Allied victory in Second World War.

(Continued on next page)

(Continued from previous page)

After the war, Bletchley Park became a venue for a variety of training organisations, including the General Post Office (GPO) – latterly called British Telecom (BT) and the Civil Aviation Authority.

Th Bletchley Park Trust was established in 1991 and the site opened to visitors in 1993, formally inaugurated by the Duke of Kent, its Chief Patron, in July 1994. In 1999, the then landowners - the government's Property Advisers to the Civil Estate and BT Group - granted a lease to the Trust, giving it control over most of the site.

June 2014 saw the completion of an £8 million restoration project by museum design specialists Event Communications.

The restoration was marked by a visit from Catherine, Duchess of Cambridge, whose paternal grandmother, Valerie Middleton and great-aunt Mary (née Glassborow) both worked at Bletchley Park during the war.

The two sisters served as Foreign Office civilians in Hut 6, where they managed the interception of enemy and neutral diplomatic signals for decryption. Valerie later married Catherine's grandfather, Captain Peter Middleton. A memorial at Bletchley Park commemorates the work of Mary and Valerie Middleton.

Continuing its educational mission, the Bletchley Park Learning Department offers educational visits and active learning programmes for schools and universities. These activities help visitors understand the site's wider significance in the history of computing and national security. Workshops cover introductions to codebreaking, cyber security and the story of Enigma and Lorenz.

Additional notes:

Many further records are held by institutions throughout the United Kingdom including:

Government Code and Cypher School, Foreign Office and General Post Office: Maintenance of Foreign Office Intercept (Y) Stations.

The Foreign Office maintained a number of Wireless Intercept (Y) Stations at strategic overseas locations during the years leading up to the Second World War. Staffed by Foreign Office personnel, these stations operated from 1938 in accordance with priorities established by the inter-departmental Y Committee rather than by the Foreign Office itself.

Foreign Office personnel also undertook traffic analysis and evaluation work overseas under the direction of GC&CS.

The RSGB National Radio Centre – A Showcase for Radio Communications Technology

The National Radio Centre - Where History Meets Modern Communication

Nestled within the wider Bletchley Park site, the RSGB National Radio Centre (NRC) reflects both the history and continuing evolution of radio communication. It displays the full spectrum of ra-

(Continued on next page)

(Continued from previous page)

dio technology, from the disciplined precision of Morse code through voice transmission to the complexity of modern digital modes and satellite systems.

At the heart of this story is the crucial role played by civilian radio amateurs during the war - men and women whose skills in tuning, listening, and decoding signals directly supported Bletchley Park's intelligence effort. It is this unique connection between amateur radio and wartime codebreaking that the NRC exists to preserve and interpret.

The Voluntary Interceptors: Britain's Secret Listeners

Voluntary Interceptors (VIs) were more than 1,500 skilled British radio-amateur civilians - often including teenagers - were recruited early in the Second World War to monitor enemy radio traffic. Initially recruited through amateur radio circles such as the London Wireless Club (which later became the Radio Society of Great Britain) and carefully vetted by the security services, these volunteers used their own radio receivers, and later government-supplied equipment, to detect and log secret Morse transmissions that regular military intercept stations might miss.

These volunteers worked under the direction of the Radio Security Service (RSS), a covert British signals-intelligence organisation created to locate and monitor enemy radio transmissions. The RSS initially operated under MI8 during the early war years before becoming part of what is now the Secret Intelligence Service (MI6) in 1942, forming an essential civilian complement to the military Y-station intercept network.

At first, the VI's task was to detect clandestine enemy agents operating within the UK, but as the war progressed, they shifted focus to monitoring German military and secret-service traffic. Most notably, they intercepted transmissions from the Abwehr - the German military intelligence service - which were copied onto log sheets and forwarded to innocuous-sounding "PO Box 25" in Barnet, North London, before being sent on to Bletchley Park for decryption.

The VI intercepts provided unique, raw material - often unobtainable from any other source - that helped Bletchley Park's codebreakers, crack complex ciphers and gain crucial insight into German operations. The work was demanding, reaching their required monthly quota of logged intercepts could even exempt volunteers from onerous home-front duties such as fire-watching, providing some recognition of their contribution. All were bound to strict secrecy under the Official Secrets Act, often unable to discuss their vital work for decades after the war ended.

Inside the RSGB National Radio Centre (NRC)

Today, the NRC is not simply a museum of radio history, but a working communications hub that brings the story of amateur radio into the present day.

Visitors move through a series of themed zones that combine historic equipment with modern operating positions, allowing them to see - and often experience - how radio communication works in practice.

(Continued on next page)

(Continued from previous page)

Across the centre, the hands-on exhibits explain how signals are generated, transmitted, and received, from basic Morse code and voice transmission through to more advanced techniques.

Interactive displays allow visitors to experiment with tuning, filtering, and decoding signals, revealing how even faint transmissions can be recovered from background noise - just as the Voluntary Interceptors once did during the war.

Understanding Modern Radio Modes

For visitors unfamiliar with radio technology, the centre demystifies modern communication methods. "Digital modes" refers to computer-based radio communication where messages are encoded as data rather than voice or Morse code - enabling everything from sending text and images to accessing email via radio waves. "Satellite working" means communicating through amateur radio satellites orbiting Earth, which act as relay stations in space, allowing operators to contact stations thousands of miles away that would normally be beyond reach.

The GB3RS Amateur Radio Station

A key feature of the NRC is its live amateur radio station, callsign GB3RS, which is on the air daily. From this operating position, licensed radio amateurs make real contacts with stations across the UK and around the world using a wide range of frequencies, antennas, and transmission modes, and visitors are very much part of the experience.

All visitors, whether licensed or not, are welcome to get on the air. Under the supervision of a qualified operator, members of the public can speak to radio amateurs around the world, often making their very first on-air contact from the historic setting of Bletchley Park itself. This hands-on experience transforms radio from an abstract concept into an immediate, tangible connection with people across continents.

For licensed amateurs, GB3RS offers something even more special. Anyone who brings a copy of their amateur radio licence is invited to operate the station independently, using its professionally installed transceivers and high-performance antenna systems - equipment capable of delivering exceptional coverage and signal strength far beyond what most home stations can achieve.

In addition to HF (high frequency), VHF (very high frequency), and UHF (ultra-high frequency) operation, the station also demonstrates digital communication and satellite working, showing how modern radio amateurs can communicate through orbiting spacecraft as easily as through ionospheric refraction - the "bouncing" of radio waves off layers of Earth's atmosphere. This continuity - from hand-sent Morse to space-based relays - mirrors the wider story of radio itself, linking the skills of wartime interceptors to the technologies of today.

(Continued on next page)

(Continued from previous page)

The station is operated by volunteers from the Radio Society of Great Britain (RSGB), and RSGB members also benefit from free admission to Bletchley Park, making the NRC not just a museum, but a practical and welcoming hub for the UK's amateur radio community.

Through GB3RS, the NRC connects past and present: a place where visitors, radio amateurs, and history meet - not as a static display, but as a living, transmitting station.

Preserving a Living Legacy

The RSGB National Radio Centre stands on the same ground where some of the most important intelligence work of the Second World War was made possible by radio. The Voluntary Interceptors - working quietly in their homes with headphones, receivers, and Morse keys - formed an invisible frontline, feeding Bletchley Park with the raw signals that would become decoded messages, strategic insight, and ultimately contributed to Allied victory.

Today, that spirit continues at the NRC. Although the technology has evolved from simple receivers and hand-sent Morse to digital modes and satellite links, the underlying principles remain unchanged: careful listening, technical skill, and the human desire to communicate across distance.

The centre succeeds in making history accessible and relevant. While the wartime exhibitions at Bletchley Park showcase the codebreaking achievements of mathematicians and linguists, the NRC tells a parallel story - one of ordinary people with technical skills who made extraordinary contributions. It's a reminder that intelligence work wasn't only conducted in the grand mansion and huts of Bletchley Park, but also in spare bedrooms and garden sheds across Britain.

By bringing together wartime history and modern amateur radio in a working, hands-on environment, the RSGB National Radio Centre does more than preserve the past - it demonstrates its continuing relevance. Every signal heard, every contact made from GB3RS, and every visitor who speaks on the air for the first time adds a new chapter to a story that began at Bletchley Park more than eighty years ago - a story that remains unfinished, evolving with each new generation of radio enthusiasts.

Based on publicly available historical sources including the Radio Society of Great Britain (RSGB), Bletchley Park Trust, and UK National Archives material written and edited as an original interpretive text by David Brown G3DJB #3448 and Chris Rayner G7BED #3431

The RSGB National Radio Centre (NRC) is a keen supporter and active promotor of CW, with a number of volunteers who are also members of CWops.

David Brown (G3DJB, #3448), *Chris Rayner* (G7BED, #3431), and *Mervyn Foster* (G4KLE, #3283) can regularly be found demonstrating CW and running hands-on sessions at the NRC for all generations – young, old and everyone in between.

Chasing 2× Mountain Goat by CW in Germany

Roberto Sadowski, K6KM (CWops #2450)

The journey to Mountain Goat status in Summits on the Air (SOTA) is measured one summit at a time. Reaching 2× Mountain Goat—2,000 activator points—takes years of planning, hiking, and operating. This summer, that milestone became the centerpiece of a nine-day CW adventure in Germany.

Two years ago, after attending Ham Radio Friedrichshafen, I stayed a few extra days to activate SOTA summits in southern Germany. The combination of beautiful trails, efficient infrastructure, and enthusiastic European chasers made such an impression that I planned a return visit. With WRTC 2026 in England scheduled only a week later, it was the perfect opportunity to combine both trips.

My goal was ambitious: activate 32 summits on the eastern side of Germany's Black Forest.

Like any successful contest expedition, preparation began long before boarding the airplane. Every summit was researched and entered into a spreadsheet with parking coordinates, hiking distance, elevation gain, estimated hiking time, and even whether a bench or picnic table was available for operating. Trailhead photos, GPX tracks, offline maps, and activation reports from previous operators all became part of the planning process. Redundancy isn't just for radios—it applies equally well to navigation.

The station followed the same philosophy. My primary radio was an Elecraft KX2, backed up by a QMX. I packed two telescoping masts, several wire antennas, multiple feed lines, spare batteries, extra baluns, and enough backup hardware to deal with the inevitable surprises that portable operation always seems to deliver.

Before heading into the mountains, I attended Ham Radio Friedrichshafen and the annual SOTA dinner, where nearly sixty activators from Europe, North America, Australia, and even the Falkland Islands gathered for an evening of good food and great conversation. Much like CW contesting, SOTA quickly turns complete strangers into friends.

For the expedition, I based myself in the town of Balingen, centrally located among my planned summits. Germany was in the middle of an unusual heat wave, and locals couldn't quite understand why anyone would voluntarily hike up mountains during the afternoon. Having lived in Arizona, however, the temperatures were manageable, especially with the dense forest providing welcome shade. Even so, four liters of water each day became the norm.

No multi-day portable trip is complete without a few equipment failures.

Late one afternoon, after my fifth summit of the day, I absentmindedly leaned against the tip of my mast—and promptly snapped it. A little field engineering kept me on the air, and a replacement mast was waiting the next morning.

A well-used 9:1 unun, after several hundred activations, also developed an intermittent connection, but redundancy once again paid dividends.

(Continued on next page)

(Continued from previous page)

Even my faithful KX2 reminded me that every radio has its personality. Occasionally the internal BNC connection between the antenna connector and tuner twists just enough to confuse the tuner. Fortunately, it is a quirk I've encountered before and can now repair in about two minutes.

Everything else performed flawlessly.

By the end of the expedition the numbers told part of the story:

- 9 days of activating
- 33 summits (one more than planned)
- 500 QSOs
- 34 DXCC entities worked
- 1,600 kilometers driven

The final summit carried special significance. Brandenkopf (DM/BW-067), a ten-point summit, would provide the last points needed for my 2× Mountain Goat award.

After eight days of hiking, my legs strongly voted for a drive-up summit.

I arrived around 0830 local time expecting a quiet morning but instead found an old inn, a restaurant, a communications tower, wind turbines, and plenty of Sunday visitors. Eventually I discovered an isolated operating position beside one of the wind turbines, complete with a weathered bench that turned out to be surprisingly comfortable for two hours of operating.

My biggest concern was RF noise from the commercial installations. Instead, the receiver greeted me with an SØ noise floor. Portable operators don't often receive gifts like that. CW was, as expected, the star performer.

The pace was relaxed but steady, and over the course of the activation I logged 92 QSOs. Later I experimented with SSB, first on 40-meters where absolutely no one answered. It wasn't propagation after all—I had wandered outside Germany's 40-meter phone allocation. Clearly, I spend far more time below 7.100 MHz than above it.

Moving to 20-meter SSB quickly solved the problem and produced a healthy pileup, but by then I had already been reminded why CW remains the preferred mode for portable operating. The efficiency, reliability, and ability to pull weak signals out of the noise simply make it the ideal companion on a mountaintop.

Operating portable from central Europe also offers a remarkable geographic advantage. Countries that would require transcontinental propagation from North America are only a few hundred miles away. By the end of the trip I had worked stations in 34 DXCC entities, including several memorable QSOs with Japan. My lone contact with the United States was W4GO in Virginia during a late-afternoon opening.

Reaching 2× Mountain Goat was certainly satisfying, but the milestone wasn't what I'll remember most.

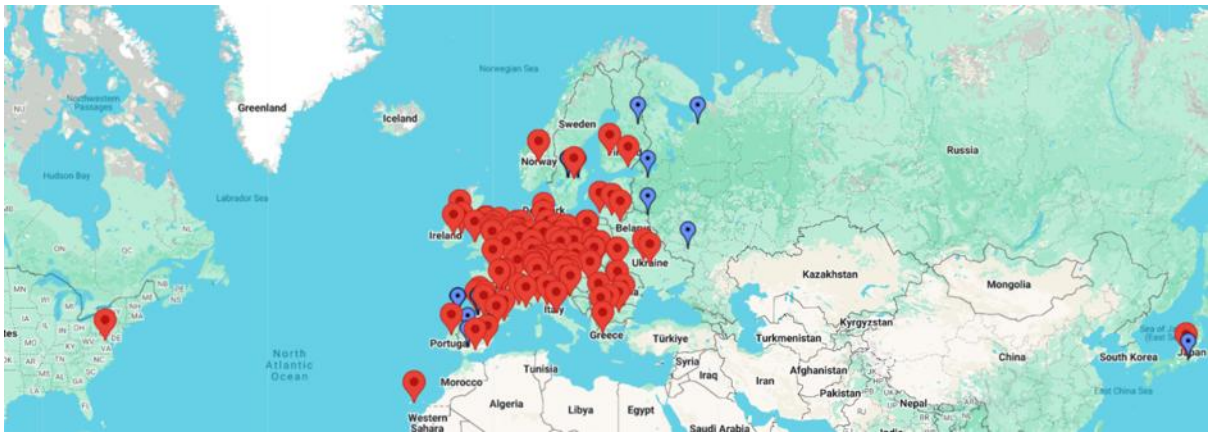
(Continued on next page)

(Continued from previous page)

Instead, it will be nine days of hiking through beautiful forests, setting up small CW stations on quiet summits, enjoying excellent propagation with an SØ noise floor, and sharing the experience with hundreds of fellow operators across Europe and beyond.

For anyone attending Ham Radio Friedrichshafen, I can wholeheartedly recommend adding a few extra days to explore Germany's SOTA summits. Bring a lightweight station, comfortable hiking shoes, and plenty of water.

The CW will take care of the rest.



#	Cont.		Country	Distance, km	QSOs										Bands
					CW	DIG	SSB	160	80	40	20	15	10	All	%	
1	NA	K	United States	7590	2							2		2	0.3	1
2	EU	9A	Croatia	730	1		1			1	1			2	0.3	2
3	EU	CT	Portugal	1920	2						1	1		2	0.3	2
4	EU	DL	Fed. Rep. of Germany	0	157		3			128	26	4	2	160	25.0	4
5	EU	EA	Spain	1620	22		5			4	20	3		27	4.2	3
6	EU	EI	Ireland	1370	5		1				5	1		6	0.9	2
7	EU	EU	Belarus	1250	1						1			1	0.2	1
8	EU	F	France	800	61	1				38	18	6		62	9.7	3
9	EU	G	England	830	44		1			15	28	1	1	45	7.0	4
10	EU	GI	Northern Ireland	1250	2						1	1		2	0.3	2
11	EU	GW	Wales	960	1		1				2			2	0.3	1
12	EU	HA	Hungary	730	17					4	11	1	1	17	2.7	4
13	EU	HB	Switzerland	570	35					33	1	1		35	5.5	3
14	EU	I	Italy	1010	23					18	5			23	3.6	2
15	EU	LA	Norway	1120	5		1				5	1		6	0.9	2
16	EU	LY	Lithuania	910	6					1	4	1		6	0.9	3
17	EU	LZ	Bulgaria	1450	4						3	1		4	0.6	2
18	EU	OE	Austria	460	26		1			22	3	2		27	4.2	3
19	EU	OH	Finland	1400	10						7	3		10	1.6	2
20	EU	OK	Czech Republic	430	22		1			12	10	1		23	3.6	3
21	EU	OM	Slovak Republic	740	6					6				6	0.9	1
22	EU	ON	Belgium	430	37					29	6	1	1	37	5.8	4
23	EU	PA	Netherlands	420	12					6	3	2	1	12	1.9	4
24	EU	S5	Slovenia	620	22					17	5			22	3.4	2
25	EU	SM	Sweden	820	24		1			1	22	2		25	3.9	3
26	EU	SP	Poland	560	43		10			14	34	5		53	8.3	3
27	EU	SV	Greece	1540	1		1				1	1		2	0.3	2
28	EU	UA	European Russia	2030	4						4			4	0.6	1
29	EU	UR	Ukraine	1400	4					1	2	1		4	0.6	3
30	EU	YO	Romania	1220	2						2			2	0.3	1
31	EU	YU	Serbia	1070			1				1			1	0.2	1
32	EU	Z3	North Macedonia	1340	1						1			1	0.2	1
33	AF	EA8	Canary Islands	3340	2						1	1		2	0.3	2
34	AS	JA	Japan	9020	6						2	4		6	0.9	2

(Continued on next page)

(Continued from previous page)

SC

My Other Hobby Is…

Apples

Chris Herter, KF7WX (CWops #3040)

Apples are my favorite fruit. Nothing else in the world of sweet fruit compares. I could eat them all day, every day (in the Fall, I eat them every day). All apples are amazing, but I've discovered a few that are spectacular.

Honey Crisp, Galla, Fuji and Red Delicious from any produce department…those varieties you know. I like all apples, including these, but the ones I adore aren't available from your grocer. They will occasionally turn up at farmer's markets or, rare-

(Continued on next page)

(Continued from previous page)

ly, on the shelves of organic coop stores. But, to reliably savor the flavor of these apple-snob apples, you have to become an *orchardist* and grow them yourself.

My home has a large backyard; large, but very steep, and very shaded. Good for growing mushrooms.

By comparison, the front yard, though tiny, is perfectly located. There is abundant sun, rich, fertile soil, and unobstructed accessibility. The back yard encompasses almost an acre of useless, ankle-breaking terrain. In the front, I have but 1000 precious sq ft of pristine, flat ground.

I maintained a lawn in the front yard for years. I never liked the lawn. I installed it because everybody else in the neighborhood had one. They do not like ham radio antennas, so my real purpose was to show them that ham radio operators are just like normal people. We even have lawns.

The lawn was expensive to maintain, though, and I was getting sick of having to mow it when I would rather be cruising the bands with my favorite key. It took less than 15 minutes to mow. I still hated it.

One afternoon my neighbors commented, "Oh, good job! You finally got around to mowing." It was all I could stand. On that very day, I set the mower blade a little lower than usual and delivered a lethal manicure that was the first step toward unconditional amputation. Where a lawn once flourished, the cornerstone of my orchard was now laid.

The design was a subject of many daydreams. I knew exactly which apple varieties I would plant. Many times, in my dreams, I calculated the size and positioning of each tree. I would need to choose dwarf and semi-dwarf rootstock to keep the trees compact. There would be a custom irrigation system, built by me, that could be fine-tuned to deliver exactly the right number of water droplets that each tree needed for maximum apple output.

I applied the most sophisticated geometry algorithm I could find to determine the maximum number of trees my tiny yard would accommodate. Every time I ran the simulation, the output was always the same: 9 trees. Not 8 trees. Not 10 trees. Only 9 trees.

So I planted 11 carefully considered trees using the Herter "I-Can-Do-Whatever-I- Want" algorithm: *Ellison's Orange, Spitzenburg, Grimes Golden, Enterprise, Akane, Cox Orange Pippin, McCouan, Red Gravenstein, Queen Cox*, and K*armijn de Sonnaville.*

I also planted a Cosmic Crisp apple tree, which was my only concession to pedestrian apples. That's because Cosmic Crips apples are a Washington State University invention and they are amazing. Store bought, however, they are a little less amazing because commercial orchardists have to pick them early to make sure they get to market. Flavor is lost that way. My Cosmic Crisp apples are picked at the peak of deliciousness. They are truly amazing.

My orchard was complete.

But I am greedy. There are hundreds of varieties. I had only 11. I wanted more.

(Continued on next page)

(Continued from previous page)

Practically speaking, I had run out of real estate. There were no places left to plant anything. The sky turned gray. The coyotes howled. My ham radio hating neighbor laughed. It was at that point, the lowest point for an apple orchardist, that I discovered a tool powerful enough to turn my despair into joy. *The grafting knife.*

With no additional space required, I was now able to add varieties simply by grafting branches from other apple trees right into my orchard of well-established trees. In effect, I began turning my mono-trees into Frankenstein trees. The stately Gravenstein tree now has a few branches that will produce *Liberty* apples. That handsome Enterprise tree will now also produce *William's Pride* and *Cortland* apples. Three other new varieties have been added in this way; *Fireside, Haralson* and an unknown variety I discovered in Eastern Washington. So many apples in such a small space. It feels like I've done something illegal.

I know what you're thinking, because I've also been thinking. This will not satisfy me very long. I only have 17 varieties. There are hundreds more in the apple universe. I will want some of them. Can I graft branches of a new variety onto a branch I grafted onto something else? To graft to a graft or not? That...is the question. A problem to be addressed in future, follow up articles.

August 11 update:

The orchard is doing great. About 10% loss so far to Apple maggots and codling moths. Still not bad for organic farming. Overall, net production will be up almost 50% compared to with 2025 because the trees are maturing (eyeballing the number of fruits on each tree and comparing photos from last year)

(Continued on next page)

(Continued from previous page)

My baby orchard - 2022

2024

Don't judge! This is 80% of my orchard as of this year. It looks terribly overgrown, but that is a matter of perspective. Most of these trees are going to get a buzz cut this year. As they mature, I'll develop them into a continuous canopy of apples!

(Continued on next page)

(Continued from previous page)

First off the tree from last year: Cosmic Crisp and Enterprise.

William's Pride to Enterprise. This graft took hold within a week! Enterprise and William's Pride are both from the PRI project to develop disease resistant apples. PRI= Purdue, Rutgers, University of Indiana. PRI appears in the names of all their varieties. William's Pride is named for the late Edwin Williams from Purdue, who was the program director.

(Continued on next page)

(Continued from previous page)

Ellinson's Orange apples, they taste like licorice, but have to be eaten within a few hours of picking, so you'll never find these in the store. I use fruit bags instead of pesticides. Deploying them is a pain in the rear end, and can take days, but once they're in place, you can forget about it until harvest.

Papa Red Gravenstein. These are the first apples out of the orchard, usually ripening at the end of July, and they are BIG. And delicious, but they don't keep very well, so best fresh off the tree.

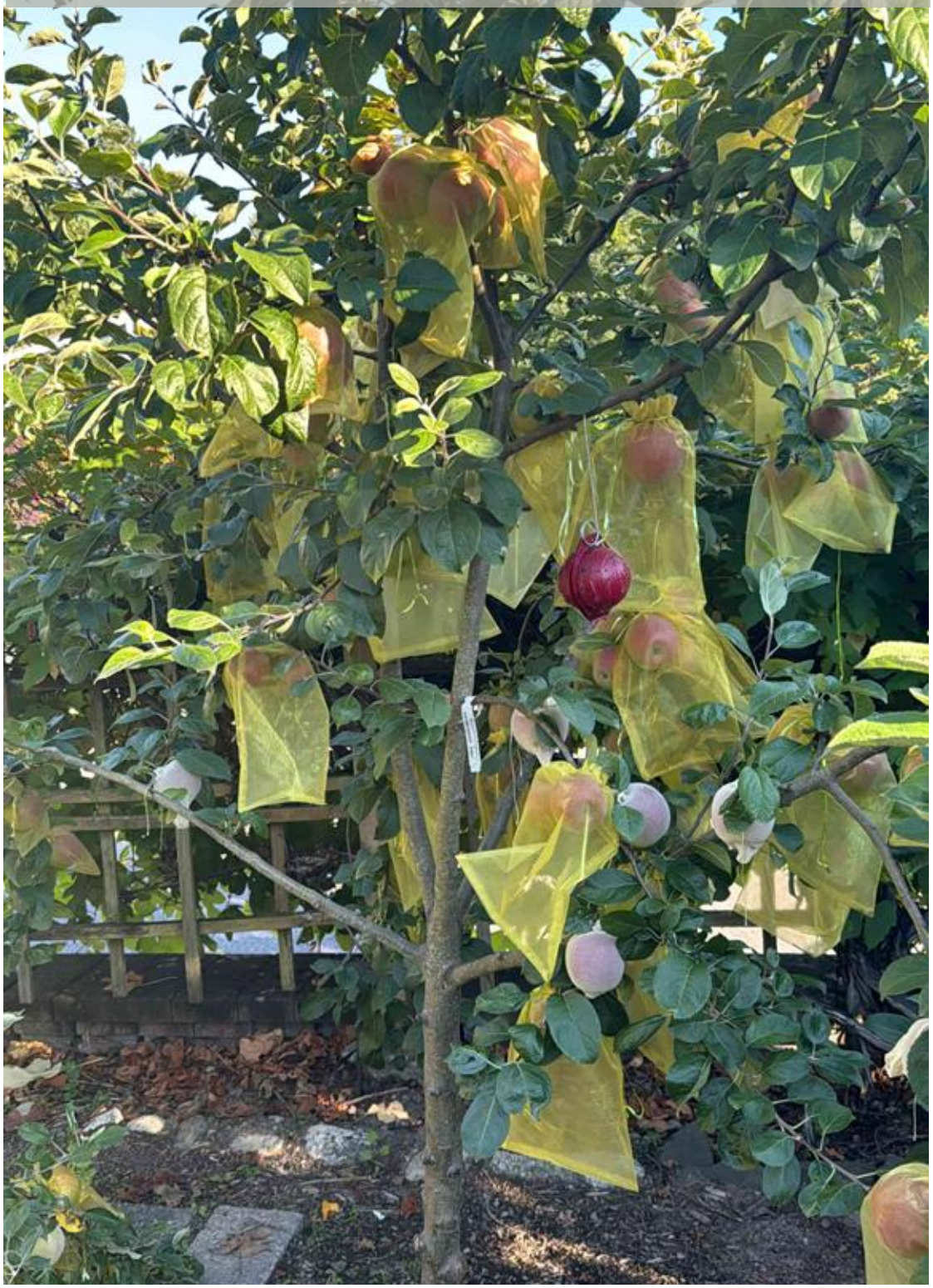
Haralson to Cox Orange graft

Liberty to Gravenstein graft from this year. All that growth is new! Apples only grow on 2 year old wood, so I won't get to bite into a Liberty apple until next year.

(Continued on next page)

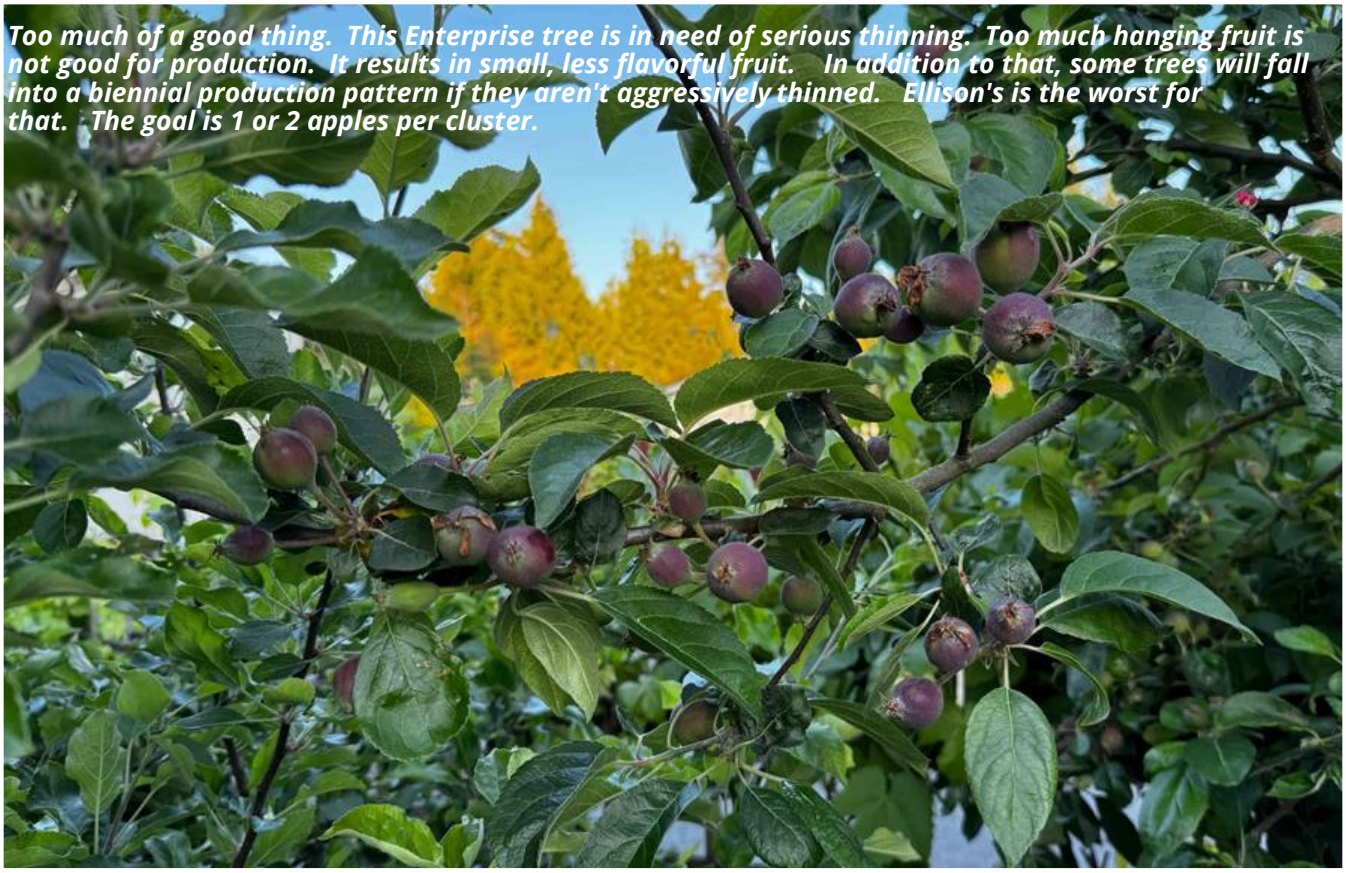
(Continued from previous page)

The red globe hanging from this tree is an apple maggot trap. It's covered in sticky resin that traps those little bastards before they get to my apples. These are the most serious apple pests in WA. They are attracted by anything round and red, which is the main reason bagging is so effective. I'll check the traps every day to see what the maggot count is. If I see an uptick, I'll deploy more traps.



(Continued on next page)

(Continued from previous page)



Too much of a good thing. This Enterprise tree is in need of serious thinning. Too much hanging fruit is not good for production. It results in small, less flavorful fruit. In addition to that, some trees will fall into a biennial production pattern if they aren't aggressively thinned. Ellison's is the worst for that. The goal is 1 or 2 apples per cluster.

Almost ready to pick!

(Continued on next page)

(Continued from previous page)

CW Open

Bruce Meier, N1LN (CWops #1141)

Announcing the 2026 CW Open Contest

It is almost time for the annual CW Open event. Yes, hard to believe but by the time you read this article, it will be less than 1 month away. Conditions may be different than last year with perhaps one exception. You guessed it – the weather. Last year it was hot. This year it is VERY HOT and, unfortunately, that seems to be a global issue. So, if you happen to be one of the fortunate operators and have an air-conditioned shack, one way to escape the heat for a few hours would be to operate one or all sessions of the CW Open.

The dates and times for the 2026 sessions are:

Session 1: Sept 5 (00:00 – 03:59 UTC)
Session 2: Sept 5 (12:00 – 15:59 UTC)
Session 3: Sept 5 (20:00 – 23:59 UTC)

Staying on the theme of high temperatures, chances are you have a few ham buddies that are also complaining about the heat. Why not contact them and see if they would like to be part of a CW Open team? Registration is simple. Just click the link on the CWops / CW Open web page and fill out the Team Registration Form. Last year we only had 17 registered teams. Let's try to get closer to the 2023 team count of 24. The team rosters ranged from a full 10 member team down to 4 members. Talk to your ham buddies and sign up! The team rosters can be made up of CWops members and non-members. It is always more fun being part of a team and might just increase your BIC (Butt in Chair) time and score! Please register early and beat the September 3 and 4 rush!!

If you have not yet participated in the CW Open, you should give it a try! Each session is a standalone event and is only 4 hours long. With that flexibility you can operate as little or as much as you want. Unlike the weekly CWTs, the CW Open is more of a marathon and less of a sprint. You don't need tons of aluminum in the air and KWs of power. Low power and dipoles work just fine for this event.

I would like to thank ICOM America for once again sponsoring the CW Open and the plaques for 2026. For more information on the qualification process and the awards offered, please check out the CW Open awards section in the CWops website.

For additional information please refer to the CW Open website at the following URL: https://cwops.org/cwops-tests/cw-open/ Look down the web page for the team sign-up link. It is lots of fun as a single op but even more fun to be part of a team. The team membership has NO GEOGRAPHIC RESTRICTIONS. It can be local, national, or international.

Hope to get you in my log for one or even better, all three sessions!

73, Bruce N1LN
CW Open Manager

QRV: CWops DX

Bill Salyers, AJ8B

This month, our guest is Vernon "Bill" Lippert, ACØW, also known as CWops member #1564. Here is a bit about our guest from his QRZ.com webpage:

From QRZ.com "My grandparents called me that because of my Uncle Bill or Uncle Vernon (same person). I was named in honor of my Uncle Vernon who they called Bill. He was killed in the Battle of the Bulge during WWII.

My interest is primarily contests. You typically can find me in most major contests. I also am the NAQP SSB Contest Manger. Plus I am the President of the Minnesota Wireless Association. More details on MWA can be found at www.w0aa.org .

I am also the current ARRL Director from the Dakota Division."

You are CWops member #1564. Who got you into CWops?

Scott KØMD nominated me and got several MWA members to sponsor me.

Did CWops have a major impact on your love of CW?

CWops restored my interest and pleasure of CW. Many years ago, I was very active on CW. Then, as other things became life priorities (school, work, family) my CW operating became dormant. Then as priorities changed, I had more time for ham radio and started ramping up my contest operating so started operating CW again. Having been away from CW for some time, I was extremely rusty. CWops was instrumental in getting me back to the speeds needed for contest operating, which helped bring back my enjoyment of CW operating.

Did the CWTs help you when it came time to work the VP5 pileups?

CW is like many skills, if you don't use it your skills will decrease over time. Regularly participating in the CWTs keeps those skills sharp so the first time on the air at VP5 I'm managing the pileups with ease. Without that, it takes me a few hours to get warmed up, during which there are mistakes that slows things down.

Something the CWTs really helped me with was featured during the recent WRTC event in England. This event, I was referee for the team that eventually finished 3rd. One of the duties of the referee is to monitor the audio (send and receive) of both stations. While initially I monitored one operator at a time, I switched to monitoring both simultaneously. Now the team leader was sending 46 wpm and the teammate was sending 40 wpm. I had no problems understanding what each was doing. Without the CWTs I doubt I would be able to do that.

(Continued on next page)

(Continued from previous page)

How has CW helped or enhanced your desire to BE DX instead of just working DX?

While I can't say it has helped the desire to be the DX, what it has helped with is finding quality locations where you can BE the DX. With my interest in contesting, you can classify me as a rate addict, so anything that gets me high rates that I can't get in the black hole I'm all for. I also enjoy helping others achieve their awards goals. Having CW skills really helps many achieve both those objectives.

What would you tell a ham who is considering learning CW?

Find someone to help you and mentor you. There are a couple of good groups to assist with this. CWops has a great learning program. There are two reasons for this. First on the receiving side, that individual can help make sure you are learning the correct way. Heading down the wrong path tends to inhibit your growth and skill. The other reason is on the sending side. That individual will help you learn the proper spacing and timing for sending. Hearing and working someone who didn't have a mentor with their poor sending is challenging to work and takes away from the enjoyment of working CW.

Do you have any other comments about CW or CWops?

CWops is a great group to get involved with. They have programs to help an individual get started learning about CW all the way up to helping you stay active with CW. As noted earlier, if you don't use the skill, eventually, you will lose it. The CWTs help keep you on the air with their weekly short format. They also have a longer format event, the CW Open. CWops also support other CW events, an example is the North American QSO Party CW where they sponsor a plaque for the winning CW team. CWops even has a scholarship program administered through the ARRL Foundation for those pursuing a college education. Bottom line, CWops does a lot to support amateur radio and help operators with their enjoyment and use of amateur radio.

CW Open – September 5, 2026

The session times will be as follows:

Session 1: 00:00 UTC, Sept 5

Session 2: 12:00 UTC, Sept 5

Session 3: 20:00 UTC, Sept 5

Event web page

New Members

Trung Nguyen, W6TN

With great pleasure we welcome the following new members to CWops:

CWops	Call	Name	CWops	Call	Name
3969	WA3N	Chris	3973	MØKKB	Steve
3970	KC1SQ*	Todd	3974	SM3NRY	Tom
3971	IT9IVU	Daniele	3975	HA7RJA*	Rob
3972	PD1RDY	Rudy			

* Lifetime member

As of August 7, 2026:

Need Sponsors:

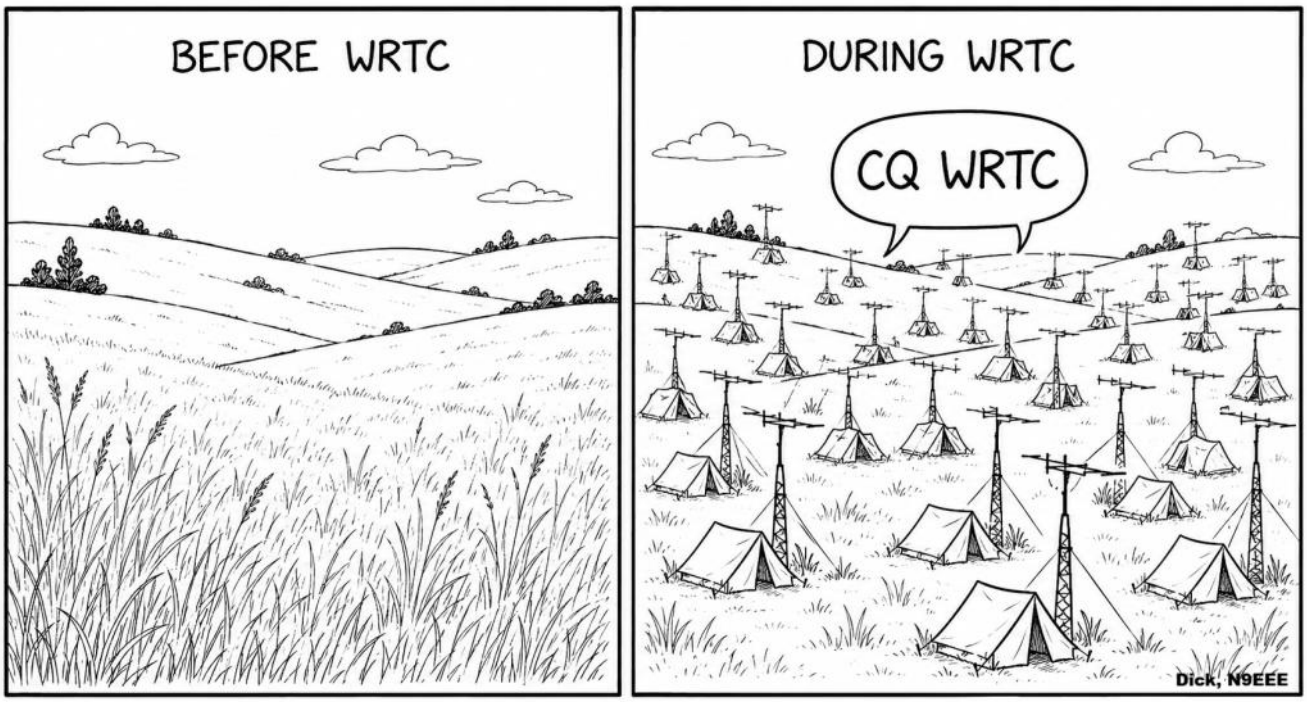
Invitations Extended: KE8LQR

For more details about nominees and up-to-date status, check the "Members only" page on the website. For information about joining CWops, check the "Membership" page on the website.

Notes: If you have updated your personal info, e.g., new QTH, new callsign, or additional callsign, please send it to membership@cwops.org so I can add it to the roster. Vice versa, if your callsign becomes inactive I can remove it, too. Then the roster will be accurate and current for our usage.

***73, Trung* W6TN** (CWops #1707)
Membership Manager

Hamming It Up



Giving Back Update

Rob Brownstein, K6RB (CWops #3)

CWops' Giving Back (GB) program is meant to provide on-air QSO experience and practice for anyone who wants it. It was initially intended as a way for our CW Academy students to get some on-air experience. We all know that when there is activity on the bands, these days, it's usually a DXpedition pileup or a contest. Today's CW aspirants have had little chance to work others who are skilled at CW, operate at moderate speed, and are committed to helping. That's the mission of Giving Back. The GB volunteers get on the air at approximately 7 pm local time and seek out CQers, or call CQ, and engage in routine QSOs including some conversational tidbits. The operators' schedule appears on the next page.

Here are the June 2026 results (GB hosts are shown in **bold**):

GW2CWO	DL2FDM M6MPC	DL2DBU	VK6GX	DL4YR	G5RRR	G3YUE	DC7CH/P
JG1UQD	JG1BGT JR2SCZ	JG1BYW	JHØNFJ	JI3DHY	JJØSFV	JL2SQK(2)	JR2AIY
JJ1FXF	JF1LXO(2) JN3QQT	JJØSFV JL2SQK	HL1ABL JJØXEQ	JA7OXI JA6SFH	JA4IIJ(2) JS2TGK	JS1QIZ/1	JE2OUK
JK1QYL	JR1DVB/1 JF1LXO KE7LOY	JJØSFV(2) JE7RMT(2) JI1CAZ	JG1BGT(4) JE3DXP JA3EBL	JS2TGK(11) JF1LXO JA1IMY	JK1WCW JE6JXD	JA6SFH JE2OUK	JR3RHI JR2BGE
JM4AOA	JA5DEH JQ3DIM	JE3AIE JS2TGK (2)	JF1LXO RØLIQ	JG1UQD/6	JJØSFV	JJØXEQ	JK6UPC
JO1DGE	BA4II JE7RMT JI3DHY JS2IMR	BH2URK JF1JDG JJØSFV(2) JS2TGK(8)	HL1LUA JF1LXO JL1FVW	HL1MIM JG1BGT(2) JL2SQK	JA4IIJ JHØNFJ JN1FAO	JE2OUK(2) JH6EZL JQ3GAJ	JE1YEM JI1CJJ JR4DKB
K1DW	VE2PID/W7 KP4Q	HA8KW WBØCBJ	W6GAF AA9MU	K9WWT	WØGOP	N5JO	KØAV
K7NJ	K7SHR K9CG	WB5DRG KI7FPM	N4JX W9GRX	K7NWP KZ4AP	K7RY N7WFO	KB6LUE VE7RIW	K5MH K9FAA
MØWDD	DKØRST GØUBE MØIYP OE3CGR	DK5IF GØWUY MØKVW PA1PDM	DL7ACH G3HZJ M7FPX/P	E7VR G5HOW M7GNO	EA1CKO G5RRR M7LLB	EA4HH LA4CIA M8JHZ	EI7HMB KA7HNA MWØBGL
N9EEE	AA6RS						
W8OV	N3WT	KR4EBK					
7L2VPL	ZL2F	JG7FYG	JK1WCW	JG1BGT	JS2TGK	JE6AJO	JS2TGK
7N2XZB	JG1BGT(2) JI3DHY JE2OUK BA4SUA	JS2TGK(6) JL1DZP JA4IIJ JE2FMZ	JF1LXO(3) JR3RHI JL2SQK	JN1MET JO7GQF JR2BGE	JR5FGP RØLGR JI1CJJ	N6TI JG7FYG(2) JA2MEI	HL5BLF JJØSFV(2) JJØXEQ

(Continued on next page)

(Continued from previous page)

Giving Back Operating Schedule - 7 PM Local

October - April: 40m & 80m | May - September: 40m & 20m

Frequencies: 7.035 - 7.039, 3.535 - 3.539, 14.035 - 14.039 MHz | JA - 7.028 +/-

UTC+10	UTC+9	UTC+7	UTC+3	UTC+2	UTC+1	UTC/BST	UTC-1	New York UTC-4	Chicago UTC-5	Denver UTC-6	Los Angeles UTC-7	Hawaii UTC-10
MON												
VK1CWO	JØ1DGE							W2XS	W8OV			
	JG1GBT											
TUE												
	7N2XZB	E25JRP		SV2BBK		GW2CWO		WE5P	K8UDH	K7NJ	W7ZDX	
	JR1WYW											
WED												
	7J1ATG							N8DD			N7DZ	
THURS												
	7N2XZB			SV2BBK				KV8Q	N9EEE	K7NJ		
	JG1BGT											
	JQ3FRX											
FRI												
	JK1QYL			SV2BBK		GW2CWO					K6RB	
						MØWDD						
SAT												
	JJ1FXF							W5DT				
	JM4AOA											
	JG1UQD											
SUN												
	JJ1FXF							W5DT				
	JM4AOA											
	7L1VPL											

CW Academy

Bob Carter, WR7Q and Roland Smith, K7OJL

Additional Help to Learn CW

Direct Auditory Comprehension: Teaching CW Through Phonics

Telegraph operators traditionally copied Morse code onto paper so messages could be passed along. Amateur radio operators occasionally still need to transcribe important details such as call signs, signal reports, names, locations, and technical information.

But ordinary conversation is different. During a friendly CW QSO, the goal is usually not to create a written record. The goal is to understand what the other operator is saying.

CW Academy has helped move Morse instruction in this direction by teaching head copy from the Beginner level. Head copy is faster and more enjoyable than writing or typing every character. However, much of what we call "head copy" is still mental transcription.

The student hears a Morse character, recalls the letter's name, stores it in memory, and eventually assembles several letters into a word:

Morse sound › letter name › spelled word › meaning

There is another useful path:

Morse sound › speech sound › word › meaning

We call this **direct auditory comprehension through "phonics"**.

With this method, the operator connects a Morse character with the sound the letter commonly makes, rather than only with its alphabetic name.

For example, **CAT** becomes:

/k/ + /ă/ + /t/ = cat

The listener does not need to hold the names "C", "A", and "T" in memory and then mentally assemble the completed word. Instead, the speech sounds are blended silently as they arrive. Context may help the listener recognize the word before it is finished, just as it does in normal conversation.

Phonics would not replace other head-copy methods. Skilled operators use several techniques at once. They recognize complete words, common word parts, abbreviations, prefixes, suffixes, Q-signals, and familiar QSO exchanges. They also spell unfamiliar material and use context to predict meaning.

Direct auditory comprehension would simply add another valuable tool.

(Continued on next page)

(Continued from previous page)

Mental spelling becomes more demanding as code speed increases. Each letter name must be recognized, remembered, and combined with the letters that follow. Phonic blending works differently. As the characters arrive closer together, their sounds begin to resemble spoken words. Faster code may actually make some words easier to recognize.

Imagine talking with a friend across a café table. We do not write down every letter before understanding the conversation. We hear sounds, recognize words and phrases, use context, and think about the meaning. Conversational CW can move toward that same experience.

Students could begin by learning one common sound for each letter and blending those sounds into short words:

M-A-P › /m/ + /ă/ + /p/ › map

S-I-T › /s/ + /ĭ/ + /t/ › sit

R-U-N › /r/ + /ŭ/ + /n/ › run

The goal is not perfect pronunciation. The goal is to create a more direct path from incoming Morse to meaning.

Transcription will always be necessary for call signs, numbers, unusual names, and technical details. But it should not be the only method taught.

For precise information, transcribe.

For unfamiliar material, spell when necessary.

For familiar words, recognize complete patterns.

For conversation, hear the sounds, blend them into words, use context, and understand the meaning directly.

Teaching “head copy” was once a major change. Today, its value is widely accepted. “Direct auditory comprehension” may be the next important step.

Many high-speed CW operators understand familiar words and phrases automatically, without consciously identifying and storing every character. They are no longer merely decoding Morse code; they are hearing it as language.

We should begin developing that ability from the start rather than waiting for it to appear after years of practice. Teaching CW through phonics could become the next major advance in CW instruction—not merely teaching students to copy code but helping them understand it directly.

The bottom line to all this, is we are adding “prototype” processes for evaluation to the Fundamental, Intermediate and Advanced curriculums to be used as desired. Please check them out and let us know your thoughts.

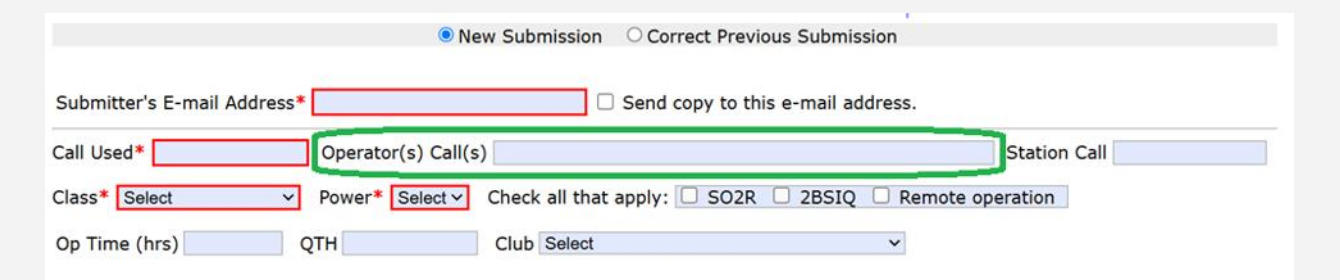
If this proves valuable, we may incorporate this in all future revisions. Thanks, and good luck.

***73, Bob,* WR7Q** (CWops #1423) CWA Admin

CWops Tests (CWTs)

Rich Ferch, VE3KI

First, a comment about a practice I have noticed some people adopting with respect to special event and remote operating call signs. A few CWops members appear to believe that when they operate this way (for example as one of the W1AW/250 stations or one of the 13 Colonies special stations, or perhaps when operating remotely under a reciprocal operating call sign in another country), they also need to operate under their own call sign for a minimum 10 QSOs in the same CWT in order to ensure they will get credit for the session towards their CWT awards. This is unnecessary. The participation points for CWT awards are assigned to the operator's call sign, not to the call sign used on the air. When you are operating under another call sign than your own, all you need to do is make sure that your own home call sign is entered in the "Operator(s)" box when submitting your claimed score in order to ensure that you get credit for that CWT.



If you are thinking that using multiple call signs with the same operator call during a single CWT would be a clever way to increase your participation score, not so; there's a limit of one participation point per operator per 1-hour CWT session. The software I use for tracking CWT participation detects multiple operations by the same operator call sign in the same CWT and only gives credit for one of them towards participation awards.

With that topic dealt with, I thought I'd move on to create and display some Top Ten lists this month. The most obvious Top Ten list for this CWT column is the top ten participation scores, i.e. the top ten call signs in the topslist.txt participation standings file (Chart 1). I have added two columns that do not appear in the topslist.txt file: QSOs (the total number of QSOs reported by that operator in CWTs so far this year), and Average (that operator's average number of QSOs per CWT session, calculated in the obvious way).

Call	CWTs	QSOs	Average
K4PQC	122	5958	48.8
PA3AAV	115	10372	90.2
KO4VW	114	13144	115.3
W4CMG	108	7995	74.0
NB7O	105	2672	25.4
W1UU	104	5826	56.0
SM5IMO	102	8834	86.6
K0VBU	100	4044	40.4
N3JT	99	9158	92.5
K3JT	95	6337	66.7

(Chart 2)

(Continued on next page)

(Continued from previous page)

If we create a Top Ten list for the QSOs column rather than the CWTs column (Chart 2), we get a different-looking list; the only call sign that appears in the top ten in both lists is KO4VW.

A third Top Ten list (Chart 3) is a list of the top ten average scores among CWops members (omitting non-members from the list). This time there are four call signs in common with the Top Ten QSOs list, but none in common with the Top Ten CWTs list. If we chose to include non-members, that would add two non-members with two CWTs each and average scores in the 200 – 215 range.

Call	QSOs	CWTs	Average
K3WW	21352	88	242.6
AA3B	18243	75	243.2
N4ZZ	13862	80	173.3
KO4VW	13144	114	115.3
W8FJ	12301	63	195.3
N7US	11759	75	156.8
N3RD	11462	54	212.3
KG9X	11268	77	146.3
KR2Q	11144	87	128.1
AI5IN	11049	71	155.6

(Chart 2)

Call	Average	QSOs	CWTs
AA3B	243.2	18243	75
K3WW	242.6	21352	88
K7RL	218.3	5893	27
N3RD	212.3	11462	54
N1LN	208.3	8959	43
N3OC	200.5	10427	52
WD6T	197.7	2372	12
K4RO	196.0	5097	26
W8FJ	195.3	12301	63
VE3EJ	192.5	7507	39

(Chart 3)

I also thought about creating a list of the top ten individual 1-hour QSO scores, but as you might be able to guess from the list of average scores, the top of the list of individual scores is dominated by two call signs. The top three scores (289, 288 and 287) were all posted by K3WW, and of the top ten QSO scores eight were posted by K3WW and two by AA3B.

It is interesting to speculate on what these lists tell us, but I think I'll stop here without further comment, at least for now.

Enjoy the CWTs and keep those reported scores coming!

73, Rich **VE3KI** (CWops #783)
CWT Manager

CWops Member Awards

Bill Gilliland, WØTG

Monthly Update

During July, five additional members submitted logs, increasing the number of active participants in the awards program to 219.

The **ACA** QSO totals and rankings for the end of July 2026 have **KR2Q** in first place and leading second place **AA3B** by 143 QSOs. The top ten ACA totals this month are: **(1**) **KR2Q, (2) AA3B, (3) KY4GS, (4) K3WW, (5) KO4VW, (6) N5RZ, (7) F6HKA, (8) KG9X, (9) KC7V** and **(10) OM2VL.** The separation between first place and tenth place is 513 QSOs.

The **ACMA** QSO totals and rankings for the end of July 2026 have **AA3B** in first place and leading second place **KR2Q** by 477 QSOs. The top ten ACMA totals this month are: **(1**) **AA3B, (2) KR2Q, (3) K3WW, (4) N5RZ, (5) KY4GS, (6) KC7V, (7) OM2VL, (8) KO4VW, (9) WT9U** and **(10) NA8V and K7QA (tie).** The separation between first place and tenth place is 1839 QSOs.

The **CMA** QSO totals and rankings for the end of July 2026 have **AA3B** in first place and leading second place **K3WW** by 3583 QSOs. The top ten CMA totals this month are: **(1**) **AA3B, (2) K3WW, (3) KR2Q, (4) N5RZ, (5) N5ZO, (6) DL6KVA, (7) NA8V, (8) F6HKA, (9) W1RM** and **(10) OM2VL**. The separation between first place and tenth place is 6746 QSOs.

The number of participants who have contacted CWops members in 100 or more **DXCC** entities increased to **104** this month with the addition of **G4IVV**.

The number of participants who have accomplished CWops **WAS** increased to **293** this month with the addition of **W1HRB** and **WA2LMC.**

You can see complete rankings for all award categories at https://cwops.telegraphy.de/scores.

CWops Award Tools Participation

At the end of 2025 we had 297 active participants in the Member Awards Program. As of August 1, 2026, we have 219 active participants. If you have not submitted any logs for the Awards Program, please submit them so we can include your scores among the participants.

The Top 100 and the Searchable and Sortable Scores Table show rankings and scores for active participants only. To be an active participant and be included in awards scoring including the ACA, ACMA and CMA competitions, you must have submitted a log during the current year.

To see rankings and scores for both active and inactive participants please use the Score Overview Table where inactive participants are listed with ACA and ACMA scores of zero, but their scores in other categories are listed at the highest level that was previously submitted.

You can see the final 2025 scores or final scores for any other year by going to the Score Over-

(Continued on next page)

(Continued from previous page)

view Table and selecting the desired year from the "Final scores:" list at the top of the page.

All scores categories on the page will then show the final scores and standings for the end of the selected year.

The Searchable and Sortable Table can graph your current year's ACA scores by date and allows you to compare your progression to that of others. Check the Plot button for the calls you wish to see plotted and they will all appear on the same graph.

The CWops Award Tools website main page provides a means of printing your CWT Participation Certificate. You may request a downloadable certificate by clicking the "CWT certificate download" selection at the top of the page. For more information about CWT Participation Awards, please go to https://cwops.org/cwops-tests/.

CWops Member Awards Program Overview

Several operating awards are available for contacting CWops members. These include **Annual Competition Award** (**ACA**) recognizing the total number of CWops members contacted during the current year, **Annual Cumulative Membership Award** (**ACMA**) counting QSOs with members on all bands (once per band) during the current year, **Cumulative Membership Award** (**CMA**) counting QSOs with members on all bands (once per band) since January 3, 2010, **CWops WAS** award for contacting members in all 50 states, **CWops DXCC** award for contacting members in countries on the ARRL DXCC list, **CWops WAE** award for contacting members in Europe, and **CWops WAZ** award for contacting members in each of the 40 CQ zones. All contacts must be via CW and between current CWops members. To qualify for these awards, you must submit your logs via the tool at the CWops Award Tools website . You can also print out your awards certificates at that same website.

A set of tools for managing your awards status is provided on the CWops Award Tools website and if you regularly upload your logs your awards will be automatically tracked for you. To view complete data for all currently active participants and see where you and others rank among active participants in the awards program, use the online tools. For more details on the tools provided, see the August 2021 *Solid Copy* article.

Please Join Us!

Fabian, DJ5CW, who created the website and the tools, made it extremely easy to participate in the awards program.

If you are not among the CWops members who are currently participating, please join us! It adds a lot of friendly competition and fun to your operating.

More Information

View our website for more information on the CWops Awards Program. Send your feedback, questions or comments to cwopscam@w0tg.com.

(Continued on next page)

(Continued from previous page)

Here are the Top 100 ACA, ACMA and CMA QSO totals as of August 1, 2026.

ACA

Rank	Call	ACA
1	KR2Q	1647
2	AA3B	1504
3	KY4GS	1400
4	K3WW	1350
5	KO4VW	1285
6	N5RZ	1266
7	F6HKA	1231
8	KG9X	1144
9	KC7V	1141
10	OM2VL	1134
11	WT9U	1121
12	NA8V	1109
13	K7QA	1108
14	W4CMG	1105
15	N7US	1082
16	N5TJ	1052
17	K3QP	1031
18	W8FN	991
19	AA2IL	974
20	KT5V	964
21	K1VUT	927
22	DL6KVA	923
23	EA1X	919
24	K3JT	915
25	VE3TM	903
26	K6NR	900
27	K9WX	897
28	NA4J	888
29	EA6EJ	876
29	K1AJ	876
30	KC3M	854
31	N5KD	847
32	VK2GR	842
33	W0UO	836
34	WS7L	835
35	KM4FO	824
36	KW1X	820
37	K1SM	812
38	N4DW	808
39	WA2LMC	796
40	NJ3K	794
41	WN7S	776
42	W4WF	743

ACMA

Rank	Call	ACMA
1	AA3B	4634
2	KR2Q	4157
3	K3WW	3769
4	N5RZ	3534
5	KY4GS	3265
6	KC7V	3066
7	OM2VL	2985
8	KO4VW	2871
9	WT9U	2869
10	NA8V	2795
10	K7QA	2795
11	KG9X	2650
12	F6HKA	2638
13	W4CMG	2446
14	N7US	2367
15	N5TJ	2355
16	K1VUT	2176
17	DL6KVA	2159
18	EA1X	2016
19	EA6EJ	2010
20	W8FN	1975
21	AA2IL	1973
22	K1AJ	1923
23	K6NR	1902
24	WS7L	1862
25	NA4J	1848
26	K9WX	1817
27	W0UO	1750
28	KT5V	1737
29	N4DW	1688
30	K3JT	1664
31	VE3TM	1653
32	KC3M	1649
33	KW7Q	1633
34	KM4FO	1592
35	WA2LMC	1569
36	N5XE	1556
37	K3QP	1544
38	N5KD	1528
39	W0VX	1525
40	N2UU	1520
41	VK2GR	1479
42	WN7S	1432

CMA

Rank	Call	CMA
1	AA3B	15573
2	K3WW	11990
3	KR2Q	11142
4	N5RZ	11125
5	N5ZO	10698
6	DL6KVA	10603
7	NA8V	10137
8	F6HKA	9739
9	W1RM	9691
10	OM2VL	8827
11	VE3KI	8407
12	KG9X	8379
13	KC7V	8344
14	K7QA	8301
15	N7US	8161
16	N5AW	7820
17	W9ILY	7771
18	WT9U	7706
19	KY4GS	7476
20	N4DW	7390
21	K1VUT	7361
22	W0VX	7266
23	K3JT	7136
24	N5TJ	7051
25	K9WX	6970
26	K6NR	6637
27	W4WF	6564
28	N1DC	6390
29	SM6CUK	6346
30	WT3K	6304
31	N2UU	6286
32	KO4VW	6245
33	WN7S	6213
34	K4IU	6149
35	W8FN	6015
36	EA1X	5888
37	AA5JF	5870
38	9A1AA	5838
39	VE3TM	5809
40	W0UO	5767
41	NJ3K	5626
42	G4BUE	5575
43	K1SM	5561

(Continued on next page)

(Continued from previous page)

ACA

43	KR3E	741
43	KW7Q	741
44	F5SGI	726
44	N2UU	726
44	W9ILY	726
45	K5OHY	719
46	N1DC	711
47	DF7TV	709
48	K9CW	696
49	K3ZA	695
50	N5XE	693
51	W0VX	691
52	WU6P	679
53	K4TZ	656
54	AA5JF	654
55	K1TR	646
56	N9FZ	643
57	VE9KK	642
58	W9CF	636
59	SM6CUK	630
60	EA6BF	629
61	W5AL	621
62	WE4AUB	619
63	VE3KIU	617
64	N2EIM	614
65	EA3NO	612
66	N5AW	610
67	W1RM	605
68	W6AYC	601
69	K4PQC	597
70	K4IU	587
71	KC4WQ	574
72	KV8Q	571
73	N5ER	570
74	NE2V	557
75	ZS1C	556
76	KK0U	554
77	VE3KI	551
78	WB2FKO	550
79	NE5A	549
80	K4GM	531
81	KY0Q	528
82	N3CKI	509
83	WT3K	500
84	M0RYB	487
85	KB8GAE	475
86	W2VM	474
87	LY2MM	466
88	WA4JUK	461

ACMA

43	K9CW	1429
44	KW1X	1415
45	NJ3K	1387
46	F5SGI	1354
47	K1SM	1349
48	W4WF	1333
49	W9CF	1330
50	EA6BF	1317
51	AA5JF	1309
52	WU6P	1301
53	W9ILY	1278
54	N1DC	1262
55	SM6CUK	1245
56	W5AL	1233
57	N5AW	1208
58	K3ZA	1196
59	K1TR	1180
60	KR3E	1170
61	K4IU	1161
62	DF7TV	1158
63	K4PQC	1145
64	N5ER	1136
65	K4TZ	1131
66	W6AYC	1129
67	WE4AUB	1120
68	VE3KIU	1114
69	VE9KK	1071
70	K5OHY	1064
71	ZS1C	1059
72	EA3NO	1055
73	WB2FKO	1047
74	N9FZ	1037
75	KY0Q	1016
76	KC4WQ	965
77	VE3KI	946
78	M0RYB	942
79	NE2V	932
80	G3NKC	930
81	KV8Q	924
82	W1RM	919
83	WS1L	916
84	K4GM	913
85	W0TG	911
86	LY2MM	896
87	KC3MAL	830
88	KK0U	821
89	N3CKI	815
90	SM0HEV	813
91	AF5J	796

CMA

44	AC6ZM	5544
45	NA4J	5531
46	N5XE	5480
47	AA2IL	5472
48	K1AJ	5438
49	GW0ETF	5332
50	KT5V	5157
51	WS7L	5131
52	K3QP	5074
53	VK2GR	5067
54	F6JOE	5006
55	WA4JUK	4946
56	W4CMG	4937
57	DF7TV	4919
58	K4GM	4908
59	DM6EE	4868
60	EA6BF	4837
61	OK1RR	4790
62	KC4WQ	4667
63	VE3MV	4618
64	KM4FO	4616
64	OZ3SM	4616
65	DJ5CW	4608
66	N5KD	4580
67	W6AYC	4560
68	F5SGI	4508
69	KY0Q	4383
70	KW7Q	4336
71	WS1L	4283
72	WU6P	4279
73	EA6EJ	4277
74	W0TG	4265
75	G4PVM	4244
76	AF5J	4163
77	K0TC	4140
78	KV8Q	4136
79	KK0U	4131
80	W2CDO	4079
81	NE5A	4077
82	NE2V	4075
83	W3WHK	4068
84	KR3E	4054
85	N1EN	4038
86	M0RYB	4035
87	KC3M	3911
88	SM0HEV	3846
89	K4TZ	3794
90	N3CKI	3780
91	HB9ARF	3709

(Continued on next page)

(Continued from previous page)

ACA

89	SM0HEV	455
90	KC9IL	453
91	K0RX	451
92	KC3MAL	446
93	KM4JEG	442
94	HB9ARF	439
94	W3WHK	439
95	G3NKC	437
96	K1RF	428
97	NB7O	425
98	9A1AA	421
98	W2CDO	421
99	W0TG	418
100	N5ZO	414
100	WS1L	414

ACMA

92	WA5RML	773
93	K1RF	758
93	DJ5CW	758
94	G4PVM	733
95	SP7OGP	731
96	NE5A	728
96	W2VM	728
97	W3WHK	726
98	KM4JEG	709
99	WT3K	703
99	SP4JFR	703
100	N2EIM	695

CMA

92	K3ZA	3681
93	KW1X	3615
94	K2YR	3469
95	4X6GP	3397
96	G3NKC	3381
97	G3LDI	3365
98	W9CF	3326
99	IT9VDQ	3313
100	W5AL	3306

***73, Bill* WØTG** (CWops #1873)
CWops Operating Awards

XXT Schedule

SPEED	XST	DAY	TIME (UTC)	EXCHANGE	SPONSOR LINK
20 - 25	**MST**	Monday	1300 - 1400z	Name + QSO serial number	International CW Coun-
20 - 25	**MST**	Monday	1900 - 2000z	Name + QSO serial number	International CW Coun-
20 - 25	**MST**	Tuesday	0300 - 0400z	Name + QSO serial number	International CW Coun-
QRS	**AWT**	Wednesday	1145 - 1200z	RST + Name	A1Club
20+ wpm	**AWT**	Wednesday	1200 - 1300z	RST + Name	A1Club
25+ wpm	**CWT**	Wednesday	1300 - 1400z	Name + CWops # (or S/P/C)	CWops
25+ wpm	**CWT**	Wednesday	1900 - 2000z	Name + CWops # (or S/P/C)	CWops
25+ wpm	**CWT**	Thursday	0300 - 0400z	Name + CWops # (or S/P/C)	CWops
25+ wpm	**CWT**	Thursday	0700 - 0800z	Name + CWops # (or S/P/C)	CWops
< 20 wpm	**SST**	Friday	2000 - 2100z	Name + S/P/C	K1USN
< 20 wpm	**SST**	Monday	0000 - 0100z	Name + S/P/C	K1USN

QTX: Enjoying the Art of Conversational CW

Dan Romanchik, KB6NU

AI Makes It Almost Too Easy.

I don't know how you do it, but every month, to figure out how many QTX and mini QTX contacts I made in a month, I would page through my log, manually calculating the length of each contact. I figured that there had to be a better way, though. So, I posted a query to /r/amateurradio subreddit, asking if anyone had possibly developed an application that could dig that information out of an ADIF file.

I got a variety of replies, but the one that stuck with me was a fellow who said, "Why don't you let the Claude AI figure that out for you?" That sounded too easy, but I thought I'd give it a try. I exported an ADIF file from QLog with all of my July contacts, uploaded it to Claude, then asked it to "find all of the CW contacts in the ADIF file that are longer than 20 minutes." In about a minute, it replied, "Found 15 CW contacts longer than 20 minutes in your log, sorted by duration," followed by a table with all of the contacts.

In addition, it explained its methodology:

"A note on method: I filtered by MODE:CW, then computed each contact's duration from TIME_ON/TIME_OFF (using QSO_DATE/QSO_DATE_OFF to handle contacts that crossed midnight, like ND4K on 7/19–7/20). WW8D at 30.4 minutes is your longest CW ragchew in the log — mostly it looks like longer 30m/40m evening/night contacts, likely ragchews rather than quick POTA or contest exchanges."

I then asked it to "find all of the CW contacts lasting between 10 minutes and 20 minutes." It quickly replied, "Found 18 CW contacts between 10 and 20 minutes," followed by a table of all the contacts.

Like I said, this is almost too easy. I know how I'm going to be doing this from now on. Not only that, I'm going to figure out how to feed Claude the data from all your form submissions and output the QTX and mini-QTX data for everyone each month. Stay tuned for that.

73, Dan **KB6NU** (CWops #1418)

This Soapbox is a little longer than usual because more CWops submitted reports this month. Thanks, everyone!

AAØYY: I enjoyed several ragchews with KE8TBM, Fred, and a few with K8XCO Char. A special QSO was with Tom, KW4CW, from Patsy Cline's hometown!

(Continued on next page)

(Continued from previous page)

AJ1DM: Another fun month of rag-chewing with my friends. It was also nice to me VE3GND, who tail-ended one of my other rag-chews. I was really sorry to learn about Mary VE3INE's lightning strike. I'm glad she escaped injury, but she now has a lot of unfortunate damage to sort out. GL Mary and I'll miss our weekly ragchews.

DG5CW: Best QSO this month was w/ SM5COP talking about the real important things in life. TNX ragchew & 73!

DK9HE: This month I made my best QTX with Greg, DF2IC. The contact lasted 36 minutes, with my Japanese GHD Bug.

GW0ETF: July has been tough for radio. Just 11 QSOs but nearly half of those were mQTX rag chews ;-)

K8UDH: This month I had a long ragchew QSO with a ham who has been off the air for a very long time. It was his first QSO in over 30 years, when he was in college. What a thrill, to share in his excitement and welcome him back on the air.

KF6NCX: On July 27, at about 9 a.m., I turned on the rig to test propagation using the RBN. I sent "TEST KF6NCX" a number of times on several bands. After a few transmissions on 40, I heard someone call me! Chuck, N6AF , and I had a nice 15-minute chat. This surprise QSO put me in a good mood!

KF9VV: I had fun this month. The longer I keep doing QTX the easier it is getting. I worked through some keyer issues and ended up installing a Logikey K3.

KG5IEE: Nice QSO with Randy, K5SL, operating /4 on Dauphin Island, AL on vacation. Randy's home QTH is Bossier City, LA about 40 miles east of me. Also had another nice QSO with Dave AI6QZ who lives on a sailboat in San Francisco Bay. He operates portable from a park on the shore of the bay.

KK7D: This month I enjoyed some great ragchews with my QRQ Crew buddies including K6TTA, W2DON, WI7M, AE6Z, AAØYY, NQ5A, WU7F, and K4MW. Conversational CW is my favorite parts of the hobby and I'm happy to participate in the QTX program.

KR2Q: I thought last month was slow...and now this? LOL.

KW4NJA: A little better this month. Thanks for all those who had a brief chat with me. Still not where I want to be with head copy, but I'll keep at it. The only way to get better is to saddle up and ride.

NØBM: Reporting includes a couple of missed months. Bands are declining but still a number of great QSOs. Worked W6JL, who operated a complete homebrew station. Check out his QRZ page, including pictures and schematics.

N2DA: Limited operation due to travel. but enjoyed a number of ragchew QSOs this month with John AJ1DM, Steve WA3JJT, Randal KG5IEE, Mike WA3PYU, and Frank W4TG.

(Continued on next page)

(Continued from previous page)

N8AI: New K4D arriving early in July pumped up my totals. Two long chats with ZL2F Tony, exchanged Internet pics of our modest wire backyard antennas that let us regularly QSO 8000 miles.

N9FZ: Some good DX in the mix this month. Tried to get lots of Qs on 6m. Waiting for my Marconi box to come in to make it a bit easier while working at my office desk hihi.

PE2V: After a heavy and stressful year it felt like I was loosing the fun of ham radio at all. Last week, my XYL and I went for a small holiday to Germany (Kronenburg Eijfel), and I forced myself to make CW contacts every day. On the second day all was working fine and I looked for ragchewing OP's and the second QSO in long time was a QSO of 25 minutes long! Wow... it felt so great and I got a bit emotional about that. In the next day's I'd made another 3 mQTX QSO's (next to other QSO's). I also did 2 CWTs (S&P). It's not that much but it feels like I am back in again.

VE3INE: QRT as of July 21st, 2026 due to house fire.

VE3WH: My thoughts this month are with my friend Mary, VE3INE. My wife and I enjoyed a wonderful lunch with her recently, and it was great to see her enthusiasm for CW and ragchewing. Just two days later, her home and station were struck by lightning, and she'll be QRT for a while. I already miss her engaging conversations and look forward to hearing her back on the air when she's able.

W1SIM: To encourage longer QSOs I suggest the QTX points be changed to 1 point per 20 minute QSO duration. A one hour QSO would then be worth 3 points.

W3WHK: Nice QSO with Rune SM5COP, who is close to my age and has spent considerable time working in the USA.

W8OV: Excellent ragchew with N3WT. Had a good one with KR4EBK, a young man who self-learned CW before becoming licensed.

WB4IT: I had 14.87 hours of ragchew time in July 2026.

WE5J: While I enjoy working near mid-30s and up for conversational CW, its hard to find partners. I've found that right about 25 wpm I'm getting many more responses. I hope to hear more higher speed ops on the air soon! Also after work settles down, I'll be back on the air more. Can not wait for that!

WS1L: Had a nice chat with Don, W6JL, about my hometown of Plymouth, Mass.

(Continued on next page)

(Continued from previous page)

QTX - July 2026

Call	QTX	Call	QTX	Call	QTX	Call	QTX	Call	QTX
VE3INE	68	KK7D	28	KG5IEE	12	G4KKU	4	W8OV	2
N8AI	45	KY4GS	25	N2DA	9	K8XCO	4	N5LB	1
WA4IAR	42	W1SIM	25	DK9HE	8	KW4NJA	3	PE2V	1
WG9P	39	K9OZ	23	DG5CW	7	WE5J	3	W3WHK	1
N7HCN	38	KF9VV	22	K8UDH	7	GW0ETF	2		
AA0YY	36	WB4IT	19	WS1L	7	KF6NCX	2		
ND4K	34	KB6NU	15	N0BM	5	KR2Q	2		
VE3WH	34	AJ1DM	12	AE4GS	4	N9FZ	2		

mQTX - July 2026

Call	mQTX	Call	mQTX	Call	mQTX	Call	mQTX	Call	mQTX
KY4GS	48	KF9VV	16	WA4IAR	7	AJ1DM	4	AE4GS	1
N8AI	31	VE3WH	15	WE5J	7	N7HCN	3	K8XCO	1
AA0YY	23	KG5IEE	13	VE3INE	6	GW0ETF	3	KF6NCX	1
WB4IT	21	DG5CW	12	K8WWS	6	PE2V	3	KR2Q	1
KK7D	19	G4KKU	11	DK9HE	5	AB0WW	3		
KB6NU	18	ND4K	10	KW4NJA	5	WG9P	2		
WS1L	17	N0BM	9	N9FZ	5	K8UDH	1		

QTX - Total 2026

Call	QTX	Call	QTX	Call	QTX	Call	QTX	Call	QTX
VE3INE	731	WS1L	140	ND4K	37	DK9HE	14	W3WHK	5
AA0YY	327	KF9VV	120	KN5EE	36	KW4NJA	14	WE5J	5
N7HCN	306	KG5IEE	98	AE4GS	29	N9FZ	14	G3EEC	3
WA4IAR	281	W1SIM	94	KK7D	28	K8XCO	12	WB3EGD	3
N8AI	264	N2DA	80	DG5CW	26	AA3TZ	11	KF6NCX	2
WG9P	248	AJ1DM	74	K8WWS	24	N3JT	8	KE7IR	1
K9OZ	171	KR2Q	65	AB0WW	21	K6DGW	7	KM4JEG	1
KB6NU	166	G4KKU	59	N9EEE	20	N0BM	7	PE2V	1
KY4GS	161	KC0VKN	58	W8OV	20	N5LB	7	SV2BBK	1
VE3WH	151	K8UDH	44	K2MZ	16	GW0ETF	5		

mQTX - Total 2026

Call	mQTX	Call	mQTX	Call	mQTX	Call	mQTX	Call	mQTX
KY4GS	360	KR2Q	82	AJ1DM	23	K6DGW	13	K8WWS	8
AA0YY	249	G4KKU	68	KB4DE	22	N7HCN	13	DK9HE	7
N8AI	206	VE3WH	61	AB0WW	20	AE4GS	11	AA3TZ	5
WS1L	187	GW0ETF	57	KK7D	19	K8XCO	11	KM4JEG	5
KB6NU	114	DG5CW	47	N9EEE	19	ND4K	11	KE7IR	4
WA4IAR	107	VE3INE	44	WE5J	18	K8UDH	10	PE2V	4
KF9VV	106	N9FZ	29	G3EEC	17	N3JT	10	W1SIM	2
KG5IEE	89	KW4NJA	28	W8OV	17	SV2BBK	10	KF6NCX	1
KC0VKN	82	WG9P	26	N0BM	14	K2MZ	9	W3WHK	1

My Story: New Member Introductions

Compiled by Tim Gennett, K9WX (CWops #1462)

Tom Plower, KG1A CWops #3966

The day I decided to learn Morse code wasn't in a classroom, it was during a communications crisis aboard USS Sampson (DDG-10) in 1974.

In 1974 I joined the U.S. Navy as an Ensign and was assigned as Communications Officer aboard USS Sampson (DDG-10), a guided missile destroyer homeported in Greece. We carried a Commander's Staff, which doubled our outgoing message traffic. Nearly all of our long-haul communications were over HF using 100 wpm single-channel RATT (RTTY). My job was to make sure we copied our incoming broadcasts and got our outgoing traffic to a communications station (COMSTA).

Then one day we found ourselves in trouble. More than 70 outgoing messages were backed up, and I couldn't raise a COMSTA to save my butt. The pressure was mounting as the backlog continued to grow. One of my radiomen casually said, "Let's try CW."

After we all picked ourselves up off the deck from laughing so hard, he explained himself. Every COMSTA still monitored a CW circuit. He sat down at the key and started calling Nea Makri, Greece. After about five minutes of dits and dahs, he stood up and yelled over the clatter of eight teletype machines, "Try the seven-megger to Nea Makri!"

We switched frequencies, established the RATT circuit, and within an hour every backlog message had been transmitted.

That was the day I decided I was going to learn Morse code. It saved my butt that day. I never forgot that lesson.

Three years later I transferred ashore and bought a cassette tape published by the ARRL called *Tune in the World with Ham Radio*. That's how I learned Morse code at 5 wpm. There were no personal computers, no software tutors, and certainly no YouTube. I simply wore that cassette out.

Within two years I earned my Novice license as KA1BXX and later upgraded to KG1A. I eventually reached 30 wpm using the ARRL code practice broadcasts and their code proficiency program. Back then you copied one minute of code by hand and mailed it to the ARRL for grading. Have you ever tried writing 30 wpm? It wasn't pretty, but they told me it was Solid Copy.

(Continued on next page)

(Continued from previous page)

For the next few years, I was on the air every chance I got. Then life happened. I married my wife, Marcia, in 1976, continued my Navy career, raised a family, and eventually retired after 26 years of service in 2000. The radios were packed away for almost forty years.

In November 2025 I bought an Elecraft KH-1. That little five-watt radio rekindled my love for CW, and I haven't looked back. Since then, I've logged more than 15,000 CW QSOs, mostly activating Parks on the Air (POTA). I was fortunate that the code came back surprisingly quickly.

I honestly don't remember ever making an SSB contact. That's not a criticism of phone operating—our hobby offers something for everyone. It simply reflects how much I've always enjoyed CW. There's something uniquely satisfying about efficiently working a pileup with just a few watts and a simple wire antenna. At 74, I'm thinking it may finally be time to try a 100-watt radio for POTA, but I suspect the little KH-1 will always have a special place in my heart.

My CW skills also paid unexpected dividends during my Navy career. On later assignments aboard frigates and destroyers, reading flashing light became second nature. The Signalmen soon learned there was an officer aboard who could read everything they were sending. Ninety percent of it was perfectly professional. It was that other ten percent that kept things interesting.

On every ship I established a MARS station so the crew could contact home under my call sign. It became a tremendous morale booster and remains one of my favorite memories from my naval career.

Marcia and I recently celebrated our 50th wedding anniversary. Our son, Tommy, is a nuclear engineer and is always willing to discuss radio with me. Our daughter, Emily, is an industrial engineer and is convinced I'm talking to aliens whenever she hears me on CW. I'm still working on convincing her otherwise. We have three grandsons, and I'm hoping at least one of them will someday become a ham.

I am honored to have been nominated for CWops by Mark Boyd, W4BD, and sponsored by Tim Hale, K5OHY, Dave Wheeler, W4DHW, and Vince Torr, AD2MM. Who doesn't appreciate an "attaboy" every now and then? Becoming a member of CWops is certainly one of mine.

My first two CWTs were humbling experiences, which is exactly why I wanted to join CWops. There's always another level to reach and another skill to learn.

I look forward to meeting many of you in future CWTs and QSOs.

Todd Rodgers, KC1SQ CWops #3970

I was first licensed in 1969 as WN2NMH with a QTH in Manhattan, New York City. I was then 14 years old. Shortly thereafter, I went “downtown” to the FCC to take my General. Passed, but 13

(Continued on next page)

(Continued from previous page)

wpm was a little more challenging.

While there, I also passed the Advance written exam… becoming WB2NMH. Drake 4C Line with a Heathkit SB-200 and Mosley TA-33 up on the roof of our apartment building made for some great contacts, almost all QSO's were phone, but I tried to get my CW speed up to 20 wpm for the Extra class license. Off to college (Johns Hopkins University, physics major) where I only had a VHF mobile rig which was not used very much. Back to NYC for graduate school at Columbia University. There began the classic "no time for hamming" period.

Married my wonderful wife, Laura, in 1982. We had two daughters and moved to Massachusetts to a 1.25 acre plot on the North Shore. I finally had room for antennae! Got a "1" call sign (KC1SQ) and got busy on the air. Again, almost 100% phone. A familiar story. Passed the Extra exam once the code requirement was dropped.

Kids off to college, we moved to the Seaport area of Boston. Sigh, no possibility for HF antennae. To keep the ham juices flowing, I put together a "go bag" (Pelican case) with an ICOM IC-7000, AH4 tuner and AC powered 12VDC supply and visited friends in the burb to do contesting. My wife and I learned to sail in Boston harbor and then started bareboat chartering. The go bag came along to our various sailing destinations: mostly the British Virgin Islands (BVI), but also Belize, where I got the call sign V31SQ. Nothing like salt water for a ground plane from a sailboat.

We bought a log cabin up in Maine, off Sebago Lake with 5 acres of mostly woods…. The foundation for the ham station always desired. There, an old friend pestered me to re-learn Morse code. He suggested enrolling in the CW Academy. Mark, K5GQ led the course and amazingly I got up to about 22 wpm reliably. I now try to join the CWT every week to continue getting better (now at about 28 wpm).

I've been a nerd for my whole life. Worked for NASA in New York City, also at the Goddard Space Flight Center when in college. A summer fellow at the VLA radio telescope in New Mexico was grand experience. Then 3 years of biomedical research (electrophysiology, cardiac pace making studies), 3 years doing flight simulation, 5 years at IBM Research, 7 years doing remote sensing work for the government, and then a whole bunch of Internet start-ups in the Boston area. Now retired but do consulting on IoT applications.

Both daughters now have kids (4 grand kids in total) and both live abroad. One in London (where I studied and acquired a UK license, G1TKR), the other in Amman, Jordan (hamming there is nearly impossible).

Looking forward to now competing in CW contests (November Sweeps my favorite).

(Continued on next page)

(Continued from previous page)

Daniele Italiano, IT9IVU CWops #3971

My name is Daniele, and I am 52 years old. I live in Belmonte Mezzagno, near Palermo, Sicily. Since I was a child, I have been passionate about electronics, computer science, and radio communications.

I have always been curious about technology and eager to understand how things work.

It is no coincidence that I became an IT technician. My childhood passion eventually turned into my profession, allowing me to work every day with computers, networks, and information systems. I enjoy solving technical problems and keeping up to date with the latest technological innovations.

One of my greatest passions is amateur radio. In particular, I love Morse code (CW), which I consider both a fascinating skill and a rewarding challenge. I enjoy participating in CW contests, where speed, accuracy, and concentration are essential. At the same time, I also appreciate simple QSOs and DX contacts, which allow me to communicate with amateur radio operators from all over the world and experience the true spirit of amateur radio.

Besides technology and radio communications, I enjoy cycling. I like both road cycling and mountain biking because they help me stay active, explore new places, and enjoy nature.

I am a curious, determined, and reliable person who believes in lifelong learning and continuous improvement. My passions and my work are closely connected, and they continue to motivate me every day.

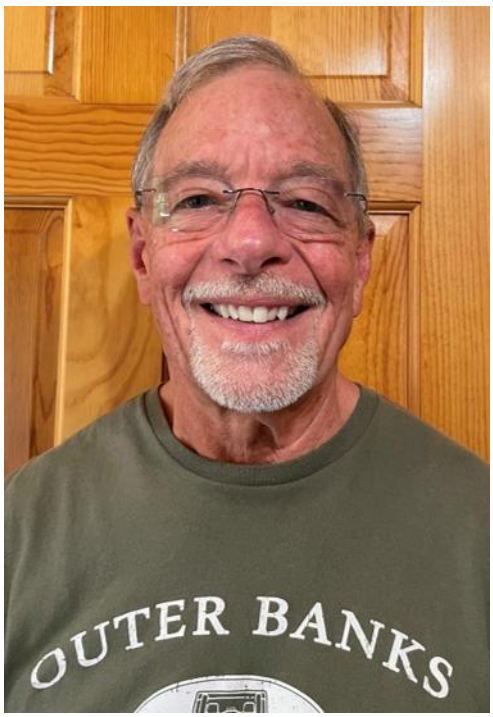
Bob Worden, KD9RKG CWops #3926

My introduction to ham radio came in the fall of 2020 when a friend of mine spotted an old police scanner that I hadn't used for years. "Why don't you clean that thing up and bring it over sometime. We'll update the frequencies." I was fascinated by his ham radio setup and vowed then and there to explore a new hobby. In January of 2021, while spending the holidays at my "second QTH" located in the St Louis area (My primary QTH is a log home located in the woods of Central WI.), I began looking for in-person testing. You'll remember that we were in the throes of Covid and in-person testing was very difficult to find, but I was able to do so with the help of some local hams. I passed my Technician exam in mid-January and passed my General exam two weeks later, thus becoming a 73 year old rookie ham. I passed my Extra exam one year later.

My introduction to CW came when I made the comment to my Elmer that I would like to listen to, or watch someone working CW, but I had absolutely no interest in learning it. (To this day, he still laughs at me for having made that statement!!) With his help, I downloaded a CW decoder and,

(Continued on next page)

(Continued from previous page)



while listening late one night, I heard a Hungarian station sending almost perfectly and I was HOOKED!! In March of 2023, I went to the CWops site and found the beginner training program. The next scheduled beginner "class", complete with ZOOM meetings, was scheduled to begin in May. But since I wasn't willing to wait, I printed the training materials and started learning. My first CW QSO came in May of 2023. As my learning progressed, I met another local ham who was/is very active in CW contesting. I was invited to join his Field Day group and completed my first (Elmer unassisted) Field Day contact.

With his guidance, I began competing in sprint contests in June of 2023. In March of 2024, one year after starting my CW learning process, I competed in the WI QSO Party and was fortunate enough to finish first in the Rookie category. In 2025, I chose to navigate for my Elmer as he competed in the mobile category of the WI QSO Party. In 2026, I competed in the Single Operator Fixed category and logged a Top Ten with a seventh place finish.

While CW contesting remains my primary focus, I have also fallen in love with POTA. In October of 2023, I attended the first annual POTA Campout Weekend in Northern WI. These weekends are organized by Michael, KB9VBR. You may have seen one of his many YouTube videos. I have since attended the following two Campout Weekends and have plans to attend again this fall. Since my initial exposure to POTA, I have logged a few activations, and my hunter log continues to grow. And, when I'm not competing or working POTA, I'll likely be researching or building yet another antenna!!

My working career consisted primarily of years spent in the insurance industry. I retired at the end of August 2012, as the Executive VP of Operations for Travel Guard, a leading worldwide travel insurer.

When I'm not enjoying my ham hobby, I spend as much time as I can outdoors. I'm an avid hunter and angler with bow hunting as my first love. I also enjoy wilderness canoeing and camping, having made 26 trips to the Boundary Waters Canoe Area Wilderness, with trip #27 scheduled for this September. And my '64 Chevy Malibu SS keeps me involved in the classic car hobby.

I would like to thank Hank, W6SX, for nominating me as well as James, KE8EON, Harve, KB3FW, Keith, K7MOA, and Dwight, KM4FO, for sponsoring my membership. I would also like to thank the two best Elmers a new ham could ever ask for – Glenn, N5IIA, and Scott, KX9RT.

By the way, we did upgrade the frequencies in that old scanner. It resides in my garage…

(Continued on next page)

(Continued from previous page)

Josh McManaway, AC9M CWops #3963

I became licensed in July of 2025 and cannot account for what moved me to look into it. I had been interested in ham radio as a kid and distinctly remember checking out an ARRL book from the library. My grandfather had served in the Army in World War II and had a communications-related MOS. He had a lifelong interest in electronics, which meant, much to the chagrin of my grandmother, he had an entire room full of radio equipment, though he never held a ham radio license, as far as I know. At the time, ham radio seemed much too technical and, as this was in 1996, the CW requirement was still in place and I had no idea how I would learn it. So, I returned the book.

In July of 2025, while on vacation with my wife's family on Lake Gaston in North Carolina, I wondered how difficult the ham radio exams were. This was July 10th. By July 12th, my wife and I began driving back to South Bend, Indiana, and I had begun studying the questions for the Technician exam. I took the exam on the 14th, began studying again that evening, and successfully went for my General on the 15th. After a couple of weeks of searching around on YouTube, I found Thomas Witherspoon's (K4SWL) YouTube channel. Thomas' CW POTA activations around the Asheville area, where my family live, piqued my interest and I knew I wanted to learn CW. I began learning in either late August or early September and then really committed to studying throughout September. I was fortunate enough to come across Forrest's (KI7QCF) YouTube channel and saw in one of his videos that he encourages people to get on air and hunt POTA as soon as they can. This seemed to be the common wisdom from other sources, too.

So, with that encouragement and just enough CW under my belt to hunt, I made my first CW QSO with Dave Baker, WB4AJL (who later nominated me for my CWops membership) on October 9th. The thrill of communicating with someone using CW sealed my fate. I threw myself into practicing and studying as much as I could. I told myself that every POTA activation had to include at least one CW QSO. In November I tested for my Extra because I was going to Rome for work in January and wanted to activate a park in Italy. I reached out to an Italian ham, Andrea IW0HK, and we met up to activate the park together. It was incredibly helpful to have a European ham to help me sort through all those call signs.

I enrolled in the intermediate CW Academy class in January of 2026 with Tom Mozdzen K7MOZ, and I am incredibly grateful for all the time that goes into arranging and teaching those classes. In March of this year, I received the vanity call sign AC9M, which is considerably lighter in CW than my previous call sign, KE9DQQ.

I would not be in this hobby were it not for the kindness of the hams I have encountered especially in the CW world, and I could not possibly list everyone to whom I owe a debt of gratitude. Special thanks are due to WB4AJL for the many IN-FL QSOs and for nominating me for CWops. I am grateful to KI7QCF, who is an incredible ambassador for the hobby and a friend.

(Continued on next page)

(Continued from previous page)

Likewise, Justin N8JMS is a model ham, a FB CW op, and all-around good person who has been an excellent resource for me.

I have to pay for this hobby somehow and I do so as a professor at the University of Notre Dame, where I specialize in the history, languages, and cultures of early Christianity. I finished my doctorate there in 2019 and came on faculty thereafter. I met my wife Margaret, an alumna of Sewanee (YSR!), in 2023 and we married in August of 2024. I am a cyclist, a beer brewer, and a backpacker. I look forward to meeting more of you on air, especially during the CWTs.

Steve King, MØKKB/W3SMK CWops #3973

One of my fondest memories from childhood was when my dad would pull out his Hallicrafters S-38 shortwave receiver. With just a short piece of wire attached to the back we heard the world coming into our home. Eventually, I was able to use the receiver on my own and was intrigued to find wall to wall Morse signals in the maritime bands and amateur radio operators chatting away. A trip to the library later and I was listening to a "Learn Morse Code" course on vinyl records. Thanks to a local ham who supervised my Novice exam I became WN3YKK, with a used Heathkit HW-16, rock bound, with a dipole in the attic. Even in those early days, Morse was not just a burden to overcome to get licensed but became a passion. Almost fifty two years later and that passion is still there.

I have been involved in many activities and modes in amateur radio over the years: traffic handling and the National Traffic System, OSCARS 6,7 and 8, and lately various digital modes, especially VARAC. But I have never lost my love of "the music of Morse."

I have never been a contester, per se, but I was intrigued to hear the relatively quiet CW segments of the bands come to life for an hour a few times a week, with stations calling CQ CWT. It was only much later that I learned what CWops was about and their mission to promote the use of Morse, especially by offering training programs for new Morse operators. So, I began participating in the CWTs, enjoying the opportunity to be active, and to meet new like-minded operators. Plus, it has been a great way to sharpen my skills!

I am retired from ministry and teaching spirituality, and two years ago I moved to the United Kingdom, where I am MØKKB. Besides CW, my other main interest in ham radio these days is the QO100 geostationary satellite. I really enjoyed the challenge of building a microwave satellite ground station.

While living in California I got involved with the Maritime Radio Historical Society (radiomarine.org) and their efforts to restore and operate historic maritime coast station, KPH — "The Wireless Giant of the Pacific." (See photo.) There I gained the coveted Radiotelegraph Operators License and was a member of the Operations Department. It was a real blessing to be in the presence of such skilled Morse operators. Despite the distance I am still involved in the MRHS as a board member.

(Continued on next page)

(Continued from previous page)

My other interests are reading, especially works on the history of radio (of course!), railroads, and ocean liners, and traveling when I can — especially by rail or by sea!

It is a real honor and privilege to now be enrolled as a member of CWops. I am ever so grateful to Rob/N6YQ, Tom/DF7TV, Lluis/EA3NO, and Bert/F6HKA for nominating and sponsoring me. Thanks! Also, thanks to Allan/VK2GR for this encouragement, support, and pulling out my tiny signal on 20 m!

Solid Copy is a monthly newsletter focused on the amateur radio world of Morse code (CW) and is written by members of The CW Operators Club (CWops) providing news and information, technical articles, member activities, contesting, operating events, awards, and club announcements. All content (text and images) remains the property of the author and/or originating source who should be contacted for reprint permission. Permission is granted—in fact, encouraged—to post this newsletter on social media outlets or forward to friends with attribution to the author and the source being CWops' *Solid Copy.*

Articles of interest by CWops members may be submitted to SolidCopy@cwops.org at any time and will be considered for inclusion in an upcoming issue. Please reference our website for guidelines for submitting articles. Any other inquiries regarding *Solid Copy* may be made to SolidCopy@cwops.org.